

Assessment of the Reach and Usefulness of the *Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs*

Lucy Wilson
Stephanie Mullen

September 2007



This report was made possible by support from the U.S. Agency for International Development (USAID) under terms of Cooperative Agreement GPO-A-00-03-00003-00. The authors' views expressed in this publication do not necessarily reflect the views of USAID or the United States Government. This publication can be accessed online at the MEASURE Evaluation Web site: www.cpc.unc.edu/measure.

ABOUT MEASURE EVALUATION

MEASURE Evaluation works to strengthen the capacity of host-country programs to collect and use population and health data. As a key component of the Monitoring and Evaluation to Assess and Use Results (MEASURE) framework of the U.S. Agency for International Development (USAID), we work closely with USAID missions to promote a cycle of data demand, collection, analysis, and use to measure progress toward addressing and confronting disease, population issues, and poverty.

We help health ministries, district caregivers, and local trainees successfully manage data for better informed program planning and policy-making. Our guidance and technical innovations empower our partners to improve family planning, maternal and child health, and nutrition programs and to confront HIV/AIDS, STIs and other infectious diseases worldwide.

MEASURE Evaluation is funded by USAID through Cooperative Agreement GPO-A-00-03-00003-00 and is implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill, in partnership with Constella Futures, John Snow, Inc., Macro International, Inc, and Tulane University. The authors' views expressed in this publication do not necessarily reflect the views of USAID or the United States Government.

For more information about MEASURE Evaluation, visit us on the Web at www.cpc.unc.edu/measure.

ACKNOWLEDGMENTS

From MEASURE Evaluation: Anton Zuiker, Stephanie Mullen, Kate McIntyre, Webb Gardner, Laurie Leadbetter, Stephen Barrett, Melissa Dunn, Hemali Kulatilaka, and Jessica Posner.

Lisa Adams (Dartmouth Medical School), Thomas Moore (Management Sciences for Health), Ann Hendrix-Jenkins (CORE Group) for supplying helpful information.

Teresa Edwards, Paul Mihas, and Lynn Hamilton from the Odum Institute for Social Science Research for assistance in designing and implementing the online survey and telephone interviews.

Colleagues at the WHO, the Stop TB Partnership, and MSH for supplying data on the number of PDF views of the *Compendium of TB Indicators* on their Web sites.

TABLE OF CONTENTS

ABOUT MEASURE EVALUATION.....	1
ACKNOWLEDGMENTS	1
ACRONYMS	3
EXECUTIVE SUMMARY	4
INTRODUCTION	6
Background Information on Assessing Publications	6
METHODOLOGY	8
Online Survey	8
Survey Dissemination	9
Telephone Interviews.....	9
Analysis of results.....	10
Strengths and Limitations	10
FINDINGS.....	12
Reach of Compendium of TB Indicators.....	12
User and Potential User Evaluations.....	14
Characteristics of Users and Nonusers	14
Characteristics of Phone Interview Respondents.....	16
Use of the Compendium of TB Indicators.....	17
Usefulness of the Compendium of TB Indicators.....	21
Feedback on the Compendium of TB Indicators	24
Other Sources of TB Control Guidance.....	27
DISCUSSION.....	31
REVIEW OF COMPARABLE TUBERCULOSIS RESOURCES.....	32
RECOMMENDATIONS	34
REFERENCES	35
APPENDIX A: ONILNE SURVEY QUESTIONNAIRE	
APPENDIX B: PHONE INTERVIEW QUESTIONNAIRE	
APPENDIX C: SELECTED QUOTES	
APPENDIX D: PDF MATRIX	
APPENDIX E: PLACES CONTAINING A REFERENCE	
APPENDIX F: COMPARABLE PUBLICATIONS	

ACRONYMS

ACSM	Advocacy, Communication, and Social Mobilization
ASTMH	American Society of Tropical Medicine and Hygiene
BCC	Behavior Change Communication
CDC	Centers for Disease Control and Prevention
CD	Compact Disc
DOTS	The internationally recommended strategy for the control of tuberculosis
GFATM	Global Fund for AIDS, Tuberculosis, and Malaria
HIPNet	Health Information and Publications Network
HIV	Human Immunodeficiency Virus
M&E	Monitoring and Evaluation
MDR-TB	Multidrug-Resistant Tuberculosis
MSH	Management Sciences for Health
NGO	Nongovernmental Organization
NTP	National Tuberculosis Control Program
MOH	Ministry of Health
PDF	Portable Document Format
PHN	Population, Health and Nutrition
PVO	Private Voluntary Organization
RPM-Plus	Rational Pharmaceutical Management-Plus
STI	Sexually Transmitted Infection
TB	Tuberculosis
TBCTA	Tuberculosis Coalition for Technical Assistance
UN	United Nations
UNC-CH	University of North Carolina at Chapel Hill
UNION	International Union Against Tuberculosis and Lung Disease
USAID	U.S. Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

The *Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs*¹, or the *Compendium of TB Indicators*, was published in August 2004 by a consortium of agencies led by the Stop TB Partnership of the World Health Organization (WHO), the U.S. Agency for International Development (USAID), and MEASURE Evaluation. This publication, intended for use by tuberculosis (TB) control and other public health professionals, provides guidance on TB-related monitoring and evaluation (M&E) and serves as a reference for standardized indicators relating to general TB programming. In the fall of 2006, an assessment of this publication was conducted to determine whether this type of guide can reach intended audiences and is a useful tool for improving monitoring and evaluation skills. Main components of the assessment included a study of its reach, online surveys and telephone interviews with potential users, and an analysis of comparable publications.

There have been 2050 printed copies and 1750 compact discs (CDs) of the English version and 500 printed copies and 500 CDs of the Spanish version of the *Compendium of TB Indicators* produced and distributed since October 2004 and September 2006 respectively. Distribution has been directed to contributing author agencies, participants at trainings on TB control, 196 libraries in 41 countries, individuals and organizations on request, and at international conferences. The guide is also available as a portable document format (PDF) file from nine different Web sites, from where it has been downloaded thousands of times, and on MEASURE Evaluation's publications compilation CD. A Russian language version is expected in 2007, and an abbreviated summary in Turkish is available from the Web site of the Turkish Ministry of Health.

An online survey was completed by 101 users and potential users of the *Compendium of TB Indicators* and phone interviews were conducted with 15 users and potential users. Forty-two percent of the online survey respondents and 60% of phone interview respondents reported that they have or have used the *Compendium of TB Indicators*. All respondents who had access to the publication reported to be using it, and use was concentrated on developing or revising M&E plans; standardizing indicators; and teaching and training activities. Over 90% of users of the publication also reported having shared it, or the information they gained from it, with others. Satisfaction with the guide, as reflected by questions about usefulness, knowledge gained, format and presentation, and overall satisfaction, was high with at least 80% of respondents reporting favorably, and none reporting dissatisfaction. The negative and positive feedback on the *Compendium of TB Indicators* greatly reflected its degree of technicality (overly technical or clear definitions) and length (too long and too many indicators or comprehensive); with satisfaction and dissatisfaction with these aspects the most commonly reported items of feedback. This discordance in responses may reflect the respondents' degree of understanding of M&E practices and use of indicators, and their subsequent ability to operationalize the *Compendium of TB Indicators*. A variety of topics, including DOTS (the internationally recommended strategy for the control of TB) coverage, multidrug-resistant TB, behavior change communication, and collaborative TB/HIV activities, were mentioned as needing inclusion or improvement as indicators within the publication.

WHO and other international health agencies have produced dozens of other publications on the control of TB. Nine of these comparable resources were listed on the online survey, which asked

respondents to indicate the ones that they have used for guidance on TB-related M&E. Respondents who did not have and had not used the *Compendium of TB Indicators* used fewer publications on average than those respondents who have or have used this publication, at 2.42 and 3.79 publications per respondent, respectively. Comparable publications that focused on indicators were much more likely to be used by respondents who reported having or having used the *Compendium of TB Indicators*.

The analysis of comparable publications found that while there are 17 other publications that include indicators and definitions related to TB control, few of these focus on TB, are intended for use as guidance, or include more than a handful of indicators. A number of publications focus on indicators for specific areas of TB control programming, such as prison-based TB care or public-private mix. The other comprehensive TB indicator guide focuses only on TB/HIV collaborative activities, and is widely used and recommended.

This assessment generated three key recommendations. First, training opportunities should continue to be offered alongside the distribution of the *Compendium of TB Indicators* so that users can fully operationalize the guide. Second, a supplemental guide should be developed to capture broader areas of TB programming, such as pediatric TB, TB-related stigma, and behavior change communication. Finally, dissemination of the *Compendium of TB Indicators* in its various formats and languages should be expanded, aiming for all NTPs to have access to a copy.

INTRODUCTION

In August 2004, a consortium of agencies led by the Stop TB Partnership and the World Health Organization (WHO), partially funded through the U.S. Agency for International Development (USAID), and with technical support from MEASURE Evaluation, published the *Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs*. This publication, henceforth referred to as the *Compendium of TB Indicators*, provides a list of some of the most widely used indicators in the monitoring and evaluation (M&E) of tuberculosis (TB) control programs. By providing standardized definitions for the calculation of indicators, it allows for accurate comparisons over time and between programs. The *Compendium of TB Indicators* has an overall objective to “encourage and facilitate internal and external M&E of TB programs to improve quality and effectiveness” (p. xi). Intended audiences include national tuberculosis control program (NTP) staff at the national and subnational level, international consultants and partners working with host-country NTPs, in-country specialists working on the evaluation of health systems, and health system planners. Contributing author agencies include WHO, the Stop TB Partnership, USAID, MEASURE Evaluation, the World Bank, the U.S. Centers for Disease Control and Prevention (CDC), the International Union Against Tuberculosis and Lung Disease (UNION), Management Sciences for Health (MSH), and KNCV Tuberculosis Foundation.

Initial plans called for a supplement to the *Compendium of TB Indicators* in which indicators related to specific programmatic areas of tuberculosis control, such as drug resistance, pediatric TB, and community-based DOTS (the internationally recommended strategy for the control of tuberculosis), would be included. As a measure of the need for and potential usefulness of such a supplement, this assessment has been designed to survey tuberculosis and public health professionals about the reach and usefulness of the existing *Compendium of TB Indicators* and to assess the coverage of comparable publications in fulfilling a need for guidance on TB indicators.

The goals of this assessment are:

- to capture information on the reach of the publication (i.e., the extent to which it has been disseminated); and
- to determine its usefulness in the field (i.e., the extent to which it is filling a need and being used).

It is important to note that this is an assessment of reach and use and not an evaluation of impact. Information on the impact the *Compendium of TB Indicators* has had on the M&E work of its potential users was not captured due to lack of resources and time.

The *Compendium of TB Indicators* was published in English in August 2004 and in Spanish in September 2006. It is available in both languages as a printed copy, on compact disc (CD), and electronically, as a portable document format (PDF) file. A Russian language version is also in the process of finalization and will be published and distributed within 2007.

Background Information on Assessing Publications

Guidance informing this assessment comes from a project completed in the spring of 2006 by the Department of Maternal and Child Health at the University of North Carolina at Chapel Hill

(UNC-CH) School of Public Health that assessed the reach and impact of two of MEASURE Evaluation's marquee publications, the *Compendium of Indicators for Monitoring and Evaluating Reproductive Health Programs*² and the *A Guide to Monitoring and Evaluation of Capacity-Building Interventions in the Health Sector in Developing Countries*³. This experience provided background knowledge and insight into MEASURE Evaluation's publications system, use of MEASURE Evaluation publications, survey software, and publication assessment precedent within the field of international health programming.

Since the completion of the prior assessment, HIPNet (Health Information and Publications Network), has compiled a draft *Guide to Monitoring and Evaluating Information Products and Services*⁴. It includes background information on monitoring and evaluating publications, courses, and other forms of information distribution, as well as a list of sample indicators with definitions and examples. The indicators in the HIPNet Guide were used to design the questionnaires for this assessment.

Other sources of information included a short report entitled "USAID Field Assessment of PHN Publications,"⁵ an unpublished paper that includes recommendations from the Population and Health Materials Working Group of USAID. Earlier publications on evaluation of information sources outside of the international health field were also used and include "Making a Difference: Measuring the Impact of Information on Development," from the International Development Research Center.⁶

During the assessment completed in the spring of 2006, it was found that few other international health agencies have significant experience evaluating publications, but a demand for such evaluation is beginning to result in more evaluations (e.g. Johns Hopkins University Center for Communication Programs survey of the weekly *The Pop Reporter* and EngenderHealth survey of Web site users, both in the spring of 2006).

METHODOLOGY

An online survey and a short telephone interview were designed to capture qualitative and quantitative data from users and potential users of the *Compendium of TB Indicators*. Users and potential users were identified in a variety of ways. Lists of NTP managers were provided by MEASURE Evaluation's Senior TB Advisor and obtained from the CDC Department of TB Elimination Web site. Individuals who had ordered copies of the *Compendium of TB Indicators* from the MEASURE Evaluation Web site were included in the survey panel, as well as participants who had attended workshops at which the *Compendium of TB Indicators* was distributed or recommended. These workshops included five MEASURE Evaluation TB M&E workshops, a one-day workshop held at the 35th UNION Conference on Lung Health in Paris in 2005, two workshops on tuberculosis control programming for private voluntary organizations (PVOs) led by the CORE Group,⁷ two workshops led by MSH RPM-Plus,⁸ and a WHO TB Surveillance and Epidemiology workshop.⁹

Also included in the survey panel were approximately 20 individuals who had visited the MEASURE Evaluation booth at the American Society for Tropical Medicine and Hygiene (ASTMH) Conference in Atlanta in November 2006. E-mail addresses were also identified for individuals who had cited the *Compendium of TB Indicators* in their work and for tuberculosis officers from WHO regional and country offices. The Stop TB listserv¹⁰ and CORE Group listserv were also identified as including potential users and their members were included in the survey panel. All of these individuals comprised the online survey panel and this same pool was used to select telephone interviewees. There were 597 individual e-mail addresses identified and an additional 4000 e-mail addresses included from the two listservs.

Online Survey

The online survey was created using Qualtrics Survey software. This software was recommended by the Odum Institute for Social Science Research at UNC-CH. It was sufficiently robust, allowing for a good deal of variation in questionnaire design and flow, multiple options for distribution, the ability to download results, and unlimited distribution and completion counts. The software is new, however, and designed for traditional surveys completed in the university setting, which meant there were some aspects of survey distribution and results tracking, such as mechanisms to prevent "ballot box stuffing," that were not entirely compatible with the use of this survey.

The online survey was designed with an initial filter question that divided respondents between those that have or have used the *Compendium of TB Indicators* and those that neither have nor have used the *Compendium of TB Indicators*. Those that have or have used the *Compendium of TB Indicators* answered a separate set of questions from those who did not have and had not used the publication. These two groups are often referred to as users and nonusers, respectively.

The goals of the survey questions for users were to learn how often respondents use the publications, how it is being used, what other resources are used, and what suggestions respondents have for the publication.

The goals for the survey questions for nonusers were to learn which other tuberculosis publications the respondents are using, where they are searching for additional guidance, and

whether or not a compendium of indicators would be useful to their work. The survey questionnaires were reviewed by a specialist on survey design from the Odum Institute, as well as the TB Technical Focus Lead for MEASURE Evaluation.

A pilot survey was designed and distributed in early November 2006. Results from that survey were used to adapt and finalize the online survey questionnaire. Changes included providing additional information about the *Compendium of TB Indicators* in the invitation e-mail, shortening the introduction page, and changing a question in the users' survey regarding other resources for tuberculosis-related monitoring and evaluation guidance to match the question in the nonusers' survey. The final survey questionnaire can be found in Appendix A.

Survey Dissemination

The survey was launched November 19, 2006 and closed on January 18, 2007. The survey was disseminated through direct e-mails and two listservs. For the majority of individual e-mail addresses, survey invitations were distributed using the Qualtrics survey software in batches of approximately 50 addresses. This strategy allowed for responses and problems to be monitored and for undeliverable e-mails, due to incorrect or out-of-date addresses, to be corrected, if possible, and resent. Reminders were sent approximately two weeks after the initial e-mail.

Participants from the MEASURE Evaluation TB M&E workshops were contacted by MEASURE Evaluation staff with a more personalized e-mail that included a link to the online survey. Individual authors of the *Compendium of TB Indicators* were also contacted by MEASURE Evaluation with an e-mail containing a link to the online survey. Reminders were not sent to the MEASURE Evaluation workshop participants or authors. Links to the online survey were sent out on the Stop TB listserv and its estimated 3200 members on January 4, 2007, and on the CORE Group listserv and its estimated 800 members on January 10, 2007.

A total of 597 individual e-mail addresses were sent a survey invitation (including MEASURE Evaluation trainees and authors, excluding those on the Stop TB and CORE listservs). Of these, however, 127 invitation e-mails bounced back, or responded with undeliverable messages. There were 102 completed responses to the online survey, yielding a response rate of between 2% and 3% of the estimated total number of people who might have seen the survey invitation from a direct e-mail or a listserv. Considering that at least 46 of the 102 respondents received a direct e-mail invitation, a response rate of nearly 9.8% of individual e-mail addresses can be estimated.

Links to the MEASURE Evaluation Web site and to the English and Spanish PDF files of the *Compendium of TB Indicators* were included at the end of the survey. Links to the MEASURE Evaluation Web site were also included on the invitation e-mail sent via the Qualtrics software. This would have enabled anyone who did not have the *Compendium of TB Indicators* to download or order a copy. An announcement about the availability of the Spanish-version compendium, including a link, was also included in the e-mail to the participants of the MEASURE Evaluation TB M&E workshop that was held in Mexico in April 2005.

Telephone Interviews

A telephone interview questionnaire was designed to capture additional qualitative data related to the use of the *Compendium of TB Indicators* and other TB-related M&E guidance and the use of

standardized indicators. The questionnaire was developed to capture some of the same information in the online survey, for individuals who had not completed the survey, or new information for individuals who had already completed the online survey. Some questions related directly to the *Compendium of TB Indicators* and were only asked of those who had or had used the publication, while other questions were about tuberculosis M&E in general and were directed to all respondents. Questions were chosen from the interview questionnaire for each respondent based on his or her access to the *Compendium of TB Indicators*, completion of the online survey, willingness to spend time on the telephone interview, and answers to preceding questions. The telephone interview questionnaire is included in Appendix B.

Fifteen telephone interviews were completed between December 3 and 21, 2006. Four of these interviews were with individuals who identified themselves in the online survey as willing to complete a phone interview. The remaining 11 interview respondents were drawn from the list of NTP managers.

Analysis of results

The online survey, with multiple-choice, yes/no, scale, and open-ended questions, was designed to capture both qualitative and quantitative data. The telephone interview consisted entirely of open-ended questions, eliciting mostly qualitative data. Some questions and responses, however, were specific enough to be added to the quantitative data analysis. In these cases, the respective response size was enlarged to incorporate telephone interview respondents. Qualtrics software produces descriptive statistics and can export data to Microsoft Excel spreadsheet, where additional analysis was done. Qualitative data from the telephone interviews and the open-ended questions on the online survey were compiled together, and then organized into topics and themes. Because of the small response size, theme groups incorporated as few as two responses.

Selected comments from the qualitative responses were highlighted and are compiled in Appendix C. Comments were selected because they illustrated or elaborated on a theme or clearly expressed a quantitative result.

Strengths and Limitations

There were a number of strengths and weaknesses to this assessment. A major strength of this assessment was the amount of time and effort that was put into background research regarding the *Compendium of TB Indicators*, its intended use and comparable publications, and the assessment of information products. This increased the thoroughness of the assessment and enabled the online survey and telephone interviews to be well-directed towards potential users of the *Compendium of TB Indicators*. The survey panel was larger because of the additional workshops and Web sites. This also enabled a greater understanding of the distribution network and reach of the *Compendium of TB Indicators*.

The number of responses to the online survey was small, but not inadequate. With a response rate between 2% and 10%, it is comparable to similar surveys. A written survey, distributed by the World Bank at two international conferences, asking about use of its publications, had responses rates between 7.6% and 38%¹¹. The *HIPNet Guide to Monitoring and Evaluating Information Products and Services* gives examples of response rates between 1% and 25%⁴. The use of the Stop TB listserv for distributing the online survey invitation and the personalized

messages to MEASURE Evaluation workshop trainees elicited significant responses. It is notable, however, that before the distribution of the invitation on the Stop TB listserv, the survey responses were tilted towards those who have or have used the *Compendium of TB Indicators*, while after this distribution, the survey responses were tilted towards those who do not have and have not used the publication.

The panel from the telephone interviews was, unfortunately, much smaller. Difficulties arose in contacting potential users and NTP managers over the telephone. The panel was further limited to respondents working in Anglophone countries. The telephone interview questionnaire had significant limitations and as this was realized, a larger panel was not pursued. As initially designed, the telephone questionnaire was overly long and at times repetitive in an attempt to capture broader responses. It was abridged for use, but some of the remaining questions confused respondents. The online survey questionnaire was clearer, and no questions consistently confused respondents.

FINDINGS

Reach of Compendium of TB Indicators

The first step in the assessment of the *Compendium of TB Indicators* was to learn about the reach of the publication. MEASURE Evaluation has printed the *Compendium of TB Indicators* in English three times, in October 2004, January 2005, and May 2006. Printed copies and CDs were produced in each batch, totaling 2,050 printed copies and 1,750 CDs. The later two batches included the printing of a one-page flyer that summarizes, “Key TB Indicators at a Glance”. In addition, there were 500 printed copies and 500 CDs of the Spanish version produced in September 2006.

The first two batches of the English version were distributed mainly to the contributing author agencies, with the WHO receiving nearly a quarter of the materials from the first printing to distribute to WHO regional and country offices and NTP programs. The UNION, USAID, and MEASURE Evaluation also received large orders. Many of the printed copies from the second batch were further distributed to participants at workshops on monitoring and evaluation of TB control programs led by MEASURE Evaluation and other agencies. These regional workshops were held in India, Tanzania, Mexico and the Ukraine. A country-specific workshop was held in Addis Abba, Ethiopia. A large section of the third batch of English copies was distributed through a HIPNet project to 196 libraries in 41 countries in September 2006. India, Nigeria, and Malawi were primary recipients of these publications shipments. In October 2006, 300 copies of the Spanish version were shipped to the Regional TB Advisor for the Pan-American Health Organization (PAHO), for further distribution through the PAHO country offices.

MEASURE Evaluation distributes printed copies and CDs on request to individuals and organizations and at conferences. The English version of the PDF file is included on a compilation CD that includes many of MEASURE Evaluation’s publications, and which is commonly and freely distributed.

Electronic PDF versions of the publication, in both English and Spanish, are available for download from many Web sites. The Web sites of each of the MEASURE Evaluation partner agencies and the contributing author agencies were thoroughly searched for mention of the *Compendium of TB Indicators* or similar resources. Internet-based searches using Google were also completed.

These searches helped to construct the matrix of PDF versions of the *Compendium of TB Indicators*, found in Appendix D. There are English PDF versions available from nine Web sites, plus a Microsoft Word version of the draft *Compendium of TB Indicators* available for download from a WHO site. There were also at least 11 links from external Web sites to the nine websites with PDF files. The WHO and MEASURE Evaluation PDF files were the ones most commonly linked to by external websites. The MEASURE Evaluation Web site is currently the only site that offers a Spanish PDF version for download. In addition, an abbreviated Turkish translation of the *Compendium of TB Indicators* was found on the Web site of the Turkish Ministry of Health (<http://www.verem.org.tr/>).

Among the Web sites of the contributing author agencies coverage of the publication varied widely. The UNION, CDC, and World Bank had no mention of the *Compendium of TB Indicators* on their Web sites. Searches of the KNCV Foundation Web site did not yield mention of the *Compendium of TB Indicators*, but the associated Tuberculosis Coalition for Technical Assistance (TBCTA) did have a PDF version of the *Compendium of TB Indicators* available from the publications page. The Global Drug Facility Web site also made no mention, but there was a PDF version of the publication on the Stop TB Partnership Web site under the tools section of Advocacy, Communications and Social Mobilization (ACSM) Working Group. It was not, however, available from the publications page of the Stop TB Partnership, nor from the publications page of MSH. MSH does have its own PDF version available from the RPM-Plus Web site and a link to the WHO file from its main Web site. It is available as a PDF from the USAID Document Experience Clearinghouse and as a link to MEASURE Evaluation's Web site from the USAID tuberculosis page. The WHO has links to its PDF file from the TB publication page as well as from the WHO library, but not from the WHO bookstore. The Web sites of a number of agencies not directly affiliated with the production of the *Compendium of TB Indicators* also had their own PDF versions, including the CORE Group, the Wageningen University and Research Center (The Netherlands), and OPAS (the Brazilian office of PAHO).

The *Compendium of TB Indicators* can be downloaded as a single PDF file from all the websites except for the WHO Web site where each chapter must be downloaded as a separate PDF file. This format makes downloading the document in its entirety time-consuming and was reported as a problem by at least one potential user interviewed during this assessment. This set-up is not standard as most other WHO documents of similar size are available as a single file.

All of the Web sites hosting their own PDF version of the *Compendium of TB Indicators* were contacted for information on the number of page views or "hits" to the specific PDF file. While not all agencies responded, information obtained about page views is recorded on the PDF Matrix in Appendix D. The number of page views, or times that the *Compendium of TB Indicators* has been downloaded, vary widely among Web sites. The MEASURE Evaluation Web site has had the greatest estimated average monthly number of page views at approximately 505 views per month (English version only). The Stop TB Partnership, WHO, and MSH's RPM-Plus Web sites each averaged 359, 121, and 8 views per month, respectively. Between its release in September 2006 and the end of December 2006, the Spanish version of the *Compendium of TB Indicators* was viewed 307 times on the MEASURE Evaluation Web site. Timeframes vary and are specified in the PDF Matrix.

The *Compendium of TB Indicators* was found to be referenced and/or cited in a number of PowerPoint presentations, scientific articles, and other publications on tuberculosis control. From Google and ISI Web of Science searches, a partial list of articles, documents and Web sites that make reference to the *Compendium of TB Indicators* was compiled and can be found in Appendix E. A non-exhaustive list of comparable publications or other resources providing guidance on TB control was also compiled. An analysis of the comparable publications can be found below in the Results section. This list of comparable publications can be found in Appendix F.

Google searches also helped to supply names and contact information for the survey panel. It was learned that the *Compendium of TB Indicators* has been taught, not only at MEASURE Evaluation workshops, but also at the CORE Group's Tuberculosis Control Programming for Private Voluntary Organizations (PVOs)¹² training sessions and at two workshops held by MSH RPM-Plus in October 2005.¹³ A draft version is also listed in the bibliography for the WHO Intercountry Workshop on Tuberculosis Surveillance and Epidemiology¹⁴.

User and Potential User Evaluations

Of the 102 respondents to the online survey, 59 respondents, or 57.8%, did not have and had never used the *Compendium of TB Indicators*, and are referred to as nonusers. Another 42 respondents (41.2%) have or have used the *Compendium of TB Indicators*, and are referred to as users.

There was one respondent who indicated that he had or had used the *Compendium of Indicators* and answered the user survey, but whose answers, however, indicated that while he was aware of the publication, he had not yet been able to access it. His answers reflected a desire to use the *Compendium of TB Indicators* but an inability to access it because of the chapter-by-chapter download feature of the WHO's Web site. A link to the entire PDF file from the MEASURE Evaluation Web site and information on how to order a printed copy were sent to this respondent, and his survey, because of the lack of additional information, was not included in the analysis.

Characteristics of Users and Nonusers

Respondents who indicated that they did not have and had never used the *Compendium of TB Indicators*, or nonusers, answered a different set of questions than users. The first two questions were designed to identify respondents who were not potential users of the *Compendium of TB Indicators*. There was only one respondent who indicated that he/she neither worked in TB control, nor health monitoring and evaluation, nor felt a list of indicators for TB programming would be part of his/her scope of work. This individual, however, was identified as having attended one of the CORE Group's trainings on TB for PVOs, and so his/her responses, which did indicate knowledge or use of comparable TB publications, were still considered as part of the survey responses.

The vast majority, 55 respondents (93%), of the 59 nonusers indicated that a guide to tuberculosis-related indicators with definitions would be useful to their work. Only one respondent indicated that his/her program was satisfied with its M&E plan, and would thus not find a compendium of TB indicators useful. Two respondents indicated that while they worked in TB control or health monitoring and evaluation, such a compendium or guide would not be useful, as this was not in their scope of work.

The 42 survey respondents who indicated that they have or have used the *Compendium of TB Indicators* worked primarily in Europe or Eurasia, (38.1%). An additional 19.1% indicated that they worked in Asia or the Near East. Sub-Saharan Africa, North America, Australia and the Western Pacific, and Latin America and the Caribbean represented working regions of between 7.1% and 11.9% of the users.

Over 32% percent of nonusers reported to work in Asia or the Near East and 27.1% worked in Europe or Eurasia. Smaller percentages of respondents worked in other areas, with 15.3% in Latin America or the Caribbean, and smaller portions in Sub-Saharan Africa, North America, and Australia and the Western Pacific. Results are shown in full in Table 1.

Table 1. Region of the World for Online Survey Respondents

Region of the World	Users of the <i>Compendium of TB Indicators</i>		Nonusers of the <i>Compendium of TB Indicators</i>	
Asia/ Near East	8	19.1%	19	32.2%
Sub-Saharan Africa	5	11.9%	7	11.9%
Europe/ Eurasia	16	38.1%	16	27.1%
North America	4	9.5%	4	6.8%
Latin America/ Caribbean	3	7.1%	9	15.3%
Australia/ Western Pacific	3	7.1%	3	5.1%
<i>Total Number of Respondents</i>	42	*	59	*

*Not all survey respondents answered this question, so percentages are less than 100%.

Respondents who have or have used the *Compendium of TB Indicators* reported having worked for a wide variety of agencies. In this section of the survey, the most common response was work with an international NGO, (28.6% of the respondents). 26.2% reported working for an NTP. An additional 16.7% reported having worked for a ministry of health. UN or other multilateral agency and bilateral aid agencies were each represented by 9.5% of the 59 respondents. Medical institutions and hospitals, local NGOs, self-employed, and “other” were less common responses, with three or fewer respondents choosing these options. No respondents indicated that they work for private sector agencies.

Nonusers of the *Compendium of TB Indicators* also worked for a wide variety of agency types. Overall, 27.1% of nonusers worked for an NTP. Work for an international NGO was the second-most common type of agency, at 22.0%. Ministries of health, academic institutions, and medical institutions or hospitals were responses for at least 10% of the respondents. Other answers were local nongovernmental organizations (NGOs), “other,” United Nations (UN) or multilateral agencies, self-employed, and bilateral aid agencies. There were no respondents from private sector agencies. For full results, see Table 2.

Table 2. Type of Agency for Online Survey Respondents

Type of Agency	Users of the <i>Compendium of TB Indicators</i>		Nonusers of the <i>Compendium of TB Indicators</i>	
Ministry of Health	7	16.7%	11	18.6%
National Tuberculosis Program	11	26.2%	16	27.1%
UN Agency/Multilateral Aid Agency	4	9.5%	2	3.4%
Bilateral Aid Agency	4	9.5%	1	1.7%
International NGO	12	28.6%	13	22.0%
Local NGO	2	4.8%	5	8.5%
Medical Institution/Hospital	3	7.1%	8	13.6%
Private Sector/Private Health Facility	0	0.0%	0	0.0%
Academic Institution	1	2.4%	10	16.9%
Self-employed	2	4.8%	2	3.4%
Other	2	4.8%	3	5.1%
<i>Total Number of Respondents</i>	42	*	59	*

*Multiple responses were allowed. Thus, the sum of the percentages is greater than 100.

Characteristics of Phone Interview Respondents

Fifteen telephone interviews were conducted with users and potential users of the *Compendium of TB Indicators*. Four of these respondents had already answered the online survey, of which three have or have used the *Compendium of TB Indicators*. These three respondents worked for a WHO country office, an international NGO, and a ministry of health. The remaining respondent, who had not used the *Compendium of TB Indicators*, worked for a ministry of health.

Of the remaining 11 respondents, six reported having either a printed copy or PDF file of the *Compendium of TB Indicators*, while five reported that they did not have the guide. All but one of these respondents were called from the list of NTP managers without prior contact and all worked within their country NTP. The remaining respondent, who had attended a MEASURE Evaluation TB workshop, responded to the survey invitation by requesting a telephone interview in lieu of completing the online survey. The 15 phone interviewees were working in Sub-Saharan Africa, Eastern Europe, the Caribbean, and Asia. Characteristics of telephone interview respondents are shown in Table 3.

Table 3. Characteristics of Phone Interview Respondents

Characteristics of Phone Interviews Respondents <i>Total Number of Respondents = 15</i>	Users of the <i>Compendium of TB Indicators</i>	Nonusers of the <i>Compendium of TB Indicators</i>
Completed online survey	3	1
Did not complete online survey	6	5
Worked for NTP	6	5
Worked for other agency	3	1
Located in Sub-Saharan Africa	4	4
Located in Latin America/Caribbean	0	1
Located in Asia	3	0
Located in Europe	2	1
<i>Total Number of Respondents</i>	9	6

Looking at the 10 respondents to the telephone interviews who were identified from the list of NTP managers, it is notable that half reported having a copy of the *Compendium of TB Indicators*. While this panel is not representative of all NTP managers, and is biased towards NTPs where staff was expected to have some English language skills, none of these individuals were expected to have a copy of the *Compendium of TB Indicators* based on the known routes of distribution. When asked how they had acquired their copy, two reported that an author had given it to them. One reported having been given the guide by their WHO country office, and one could not remember how he had acquired a copy. Another respondent reported having received copies from both the local WHO office and from an author.

The phone interview questionnaire also asked nine questions about the development of the M&E system within the respondent’s respective NTP program, as evidenced by the existence of a number of aspects that commonly compose an M&E system. Nearly all of the respondents reported that their NTP had all of the aspects of an M&E system. As such, most of these questions revealed little about the degree of complexity in the implementation of M&E systems in relation to use of the *Compendium of TB Indicators* or other aspect. One question, relating to the source of indicators for use within the M&E system was informative, and results are discussed below in the section concerning the use of this publication.

Use of the Compendium of TB Indicators

Online survey and phone respondents who indicated that they have or have used the *Compendium of TB Indicators* were asked about their frequency of use. Of the 47 respondents who indicated that they have or have used the *Compendium of TB Indicators*, 25 respondents (53.2%) indicated that they have used the *Compendium of TB Indicators* “a few times (1-5 times)”. Twenty-one respondents (44.7%) indicated that they have used the *Compendium of TB Indicators* “often (more than 5 times)” and only 1 respondent reported that he or she had never used the publication. These results are compiled in Table 4.

Table 4: Frequency of Use Responses for *Compendium of TB Indicators*

Responses to “For your work, how often have you used the <i>Compendium of TB Indicators</i> , or information you have gained from the <i>Compendium</i> ?”	Number of responses*	Percentage
Often (more than 5 times)	21	44.7%
A few times (1-5 times)	25	53.2 %
Never	1	2.1%
<i>Total Number of Respondents*</i>	47	100%

*Includes both online survey and phone interview respondents

Only one respondent indicated that he or she had never used the *Compendium of TB Indicators*. The response of “Never” was followed, however, by this statement:

“The M&E framework for NTP was developed based on the *Compendium of TB Indicators* and submitted to the technical [bureau] staff for review and [finalization] but the [NTP] staff did not have time to meet yet.”

The same respondent goes on to report that he/she has gained knowledge from the *Compendium of TB Indicators*, has found it to be useful, and has shared the *Compendium of TB Indicators* with

colleagues. The answer indicating that he/she has never used the *Compendium of TB Indicators* seems to reflect that he/she has not yet used the programming framework that was developed using the *Compendium of TB Indicators*.

Respondents who use the *Compendium of TB Indicators* reported that they use it in a number of ways. On the online survey, six types of use were offered in a multiple-choice question. There was also space for respondents to add comments. Telephone interview respondents were also asked about their type of use. These open-ended responses were compiled with the multiple-choice responses for reporting. “Developing or revising M&E plan” was the most commonly cited reason for use, with 32 responses (71% of all respondents) choosing this option. “Standardizing indicators” was the second most common response with 31 responses (63%). Twenty-two respondents (45%) reported using it for “training and/or teaching,” and 11 respondents (22%) reported using it for “informing policy and advocacy.”

Nine (18%) and eight (16%) of the respondents indicated using the *Compendium of TB Indicators* for reference or resource and for proposal development, respectively. Six respondents (12%) reported using the guide for research and for implementing monitoring and evaluation activities. There were five reports of “other” use and two reports of using it to develop new indicators. These results are summarized in Table 5.

Selected quotes from the online survey:

- *I used the [Compendium of TB Indicators] more than five times in 2005 and 2006 in many great activities: Reviewed and up-dated our national program guide in February, up-dated manuals of training of all workers (physicians, nurses, public health workers) of tuberculosis in the country. And when we elaborated our Strategic Plan for five years (2006-2010) in June 2005.*
- *I use the [Compendium of TB Indicators] every time I need clear information about a highly specific indicator (definitions, what is measures, ...) or M&E terms, usually with the occasion of preparing proposals, workplans, and others ...*

Table 5: Type of Use Responses from Users of the *Compendium of TB Indicators*

Responses to “How have you used the <i>Compendium of TB Indicators</i> ?”	Open-ended responses**	Multiple-choice responses	Total number of responses	Percentage
Developing or revising M&E plan	3	32	35	71%
Standardizing indicators	7	24	31	63%
Training/teaching	1	21	22	45%
Informing policy and advocacy	1	10	11	22%
Reference/resource	9	†NA	9	18%
Proposal development	8	NA	8	16%
Research	1	5	6	12%
Implementing M&E activities	6	NA	6	12%
Other		5	5	10%
Development of new indicators	2	NA	2	4%
Total Responses	38	97	135	*

*Multiple responses were allowed. Thus, the sum of the percentages is greater than 100. N=49.

**From both online surveys and phone interviews.

†NA indicates that it was not included as a multiple-choice response.

All of the respondents of the telephone interviews reported that their TB program used standardized indicators. As such, they were asked how these indicators were chosen. Some respondents mentioned specific sources, while others referred to the collaborations or discussions that were involved in the process of choosing, and some gave multiple answers. The most common response, with six instances, was that the indicators were chosen based on discussions with donors and other partners. Four respondents reported that the indicators are based on the standard WHO plan. Three respondents reported that indicators were chosen from the *Compendium of TB Indicators*. Each of the following responses was mentioned by two respondents: based on activities, from discussions amongst NTP staff, and the process for choosing indicators was unknown. Other respondents mentioned that they chose indicators from data available in reports, based on personal experience, and from other [unspecified] publications. These results are shown in Table 6.

Table 6. How Respondents Choose Standard Indicators

Responses to “How were indicators chosen?”*	Number of Responses
With donors or other partners	6
Based on WHO standard plan	4
From <i>Compendium of TB Indicators</i>	3
Based on activities	2
From discussions amongst NTP members	2
Unknown	2
From data available in reports	1
From personal experience	1
Other publications	1

*Asked only of phone interview respondents who have or have used the *Compendium of TB Indicators*. N=9.

Users of the *Compendium of TB Indicators* were asked if they have ever shared the publication, or the knowledge that they gained from it, with colleagues. Over half (51.2%), or 21 respondents, reported having shared the *Compendium of TB Indicators* “a few times (1-5 times).” Seventeen respondents (41.5%) reported having shared the guide “often (more than 5 times)” and only three respondents (7.3%) reported that they had never shared the *Compendium of TB Indicators* or the knowledge they had gained from it.

Those that had shared the *Compendium of TB Indicators* used the open-ended additional comment space to explain to whom or how they shared it. Nine individuals reported that they shared it with local, in-country NTP or NGO staff or colleagues and nine individuals reported that they shared it with NTP or NGO staff or colleagues in other countries. Six reported having shared it by means of training or a workshop. Four reported having shared it with unspecified colleagues and three reported having shared it with local or in-country partner agencies. These results are summarized in Table 7.

Table 7: Frequency and Means of Sharing *Compendium of TB Indicators*

Responses to “Have you shared the <i>Compendium of TB Indicators</i> , or information from the <i>Compendium</i> , with other health professionals?”*	Number of responses	Percentage
Often (more than 5 times)	17	41.5%
A few times (1-5 times)	21	51.2%
Never	3	7.3%
<i>Total number of respondents</i>	41	100%
Responses to “If so, how? To whom?”*		
• With internal or local NTP or NGO staff	9	**
• With NTP or NGO staff or colleagues in other countries	9	**
• By means of a training course or workshop	6	**
• With colleagues (unspecified)	4	**
• With in-country or local partners	3	**

*Asked only of respondents from online survey who have or have used the *Compendium of TB Indicators*.

**Qualitative response; percentages not calculated. N=41.

Respondents of both the online survey and the telephone interview who use the *Compendium of TB Indicators* were also asked if they had ever adapted the publication to make it more useful to their context. Twenty-three respondents (57.5%) reported that they had, and 17 respondents (42.5%) reported that they had not. Few respondents explained how they had adapted it. Among those who did explain, two respondents reported using it for each of the following: district level use; a specific situation; develop new indicators; and translation. There were also five individuals who stated that they saw no need for the guide to be adapted. These results are summarized in Table 8.

Table 8: Adaptation of *Compendium of TB Indicators*

Responses to “Have you adapted the <i>Compendium of TB Indicators</i> to make it more useful to your context?”*	Number of responses	Percentage
Yes, I have adapted it.	23	57.5%
No, I have not adapted it.	17	42.5%
<i>Total number of respondents</i>	40	100%
Responses to “If so, how?”*		
• Adapted for district-level use	2	**
• Adapted for specific situation	2	**
• Developed new indicators	2	**
• Translated	2	**
• No need for adaptation	5	**

*Asked only of respondents from online survey who have or have used the *Compendium of TB Indicators*.

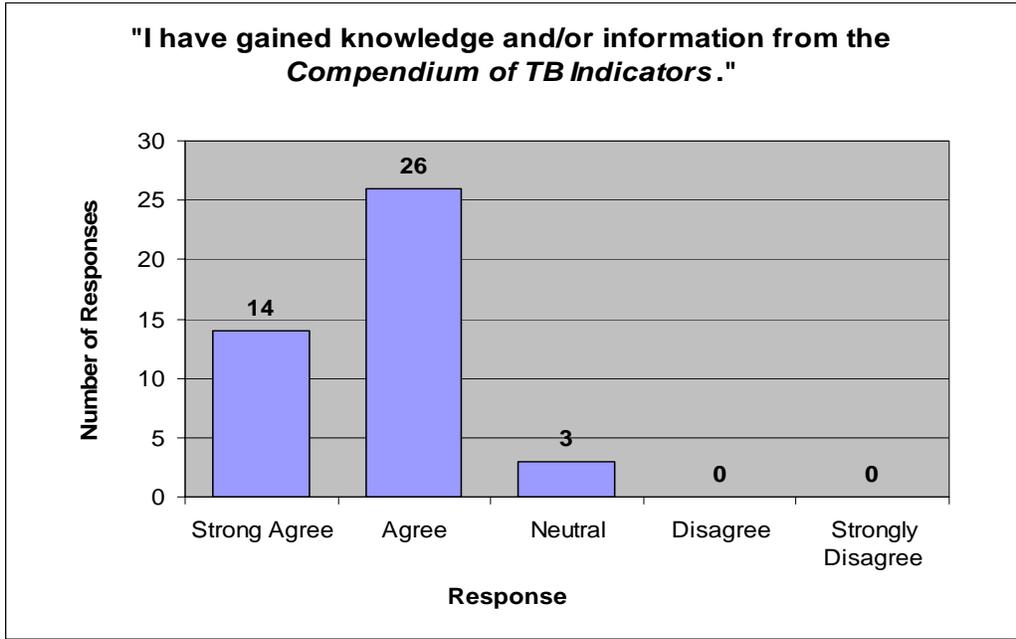
**Qualitative response; percentages not calculated. N=40.

Usefulness of the Compendium of TB Indicators

Online survey respondents who reported having or having used the *Compendium of TB Indicators* were asked about their perceptions of usefulness and satisfaction with the publication. These questions had five possible responses corresponding to degrees of agreement or satisfaction.

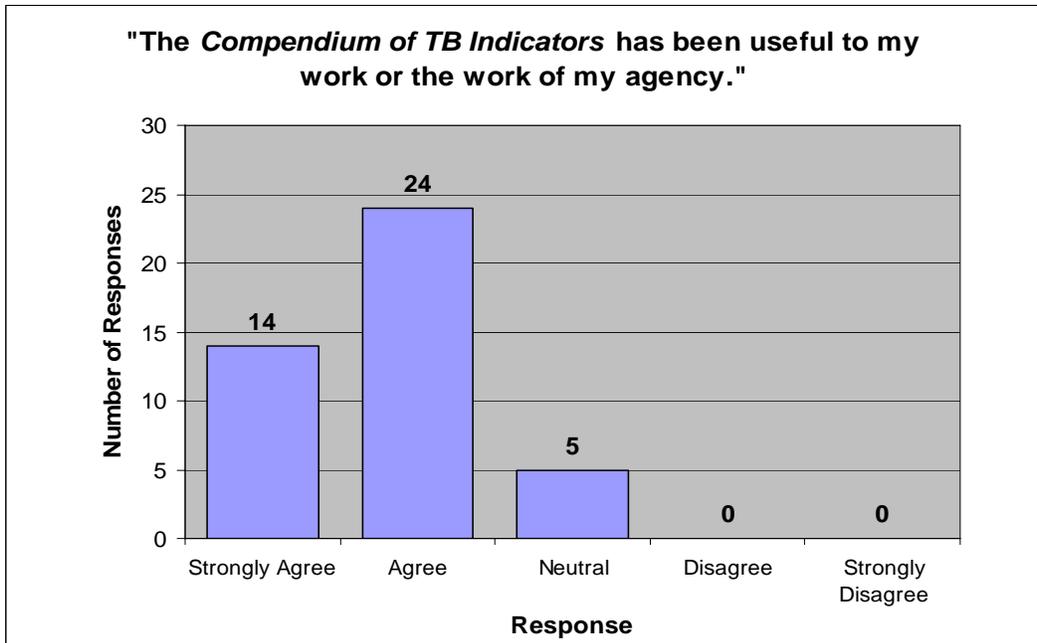
The first question asked respondents to react to the following statement: “I have gained knowledge and/or information from the *Compendium of TB Indicators*.” Fourteen respondents (33.3%) reported that they strongly agreed with this statement. Twenty-six respondents (61.9%) reported that they agreed, and three (7.1%) reported that they were neutral. One respondent reported to both agree and strongly agree with this statement, so that the sum of the percentages is greater than 100. No respondents disagreed or strongly disagreed with this statement. Results are shown in Figure 1.

Figure 1. The extent to which users reported knowledge was gained from the *Compendium of TB Indicators*.



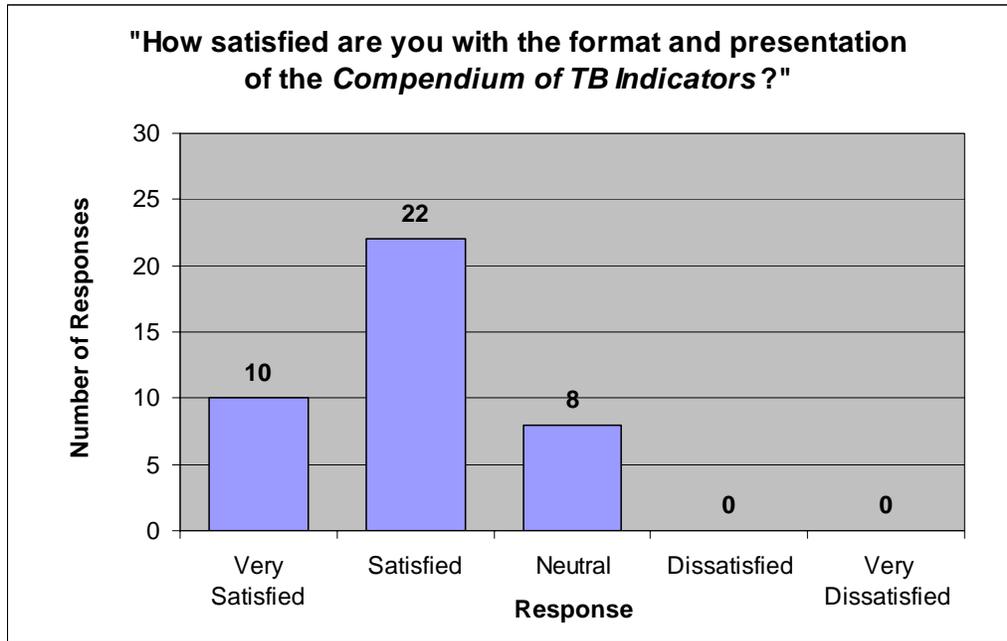
The second of these questions included the following statement: “The *Compendium of TB Indicators* has been useful to my work or the work of my agency.” Responses were similar with 14 respondents (33.3%) reporting that they strongly agreed with this statement. Twenty-four respondents (57.1%) reported that they agree, and five respondents (11.9%) were neutral in regards to the statement. One respondent reported to both agree and strongly agree with this statement. No respondents disagreed or strongly disagreed. Results are shown in Figure 2.

Figure 2. The reported usefulness of the *Compendium of TB Indicators*.



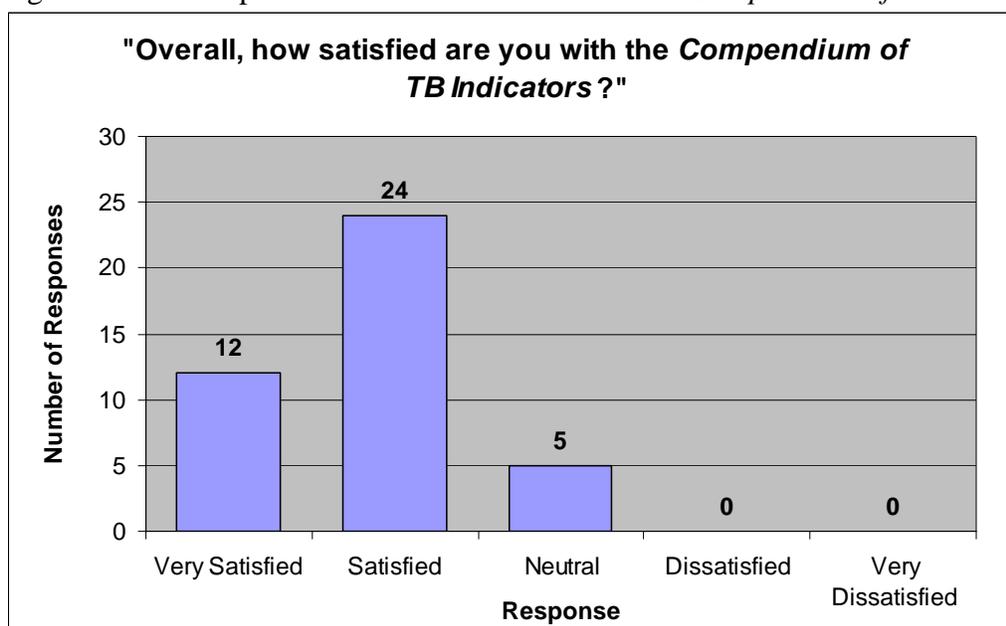
Next, the users were asked to what degree they were satisfied with the format and presentation of the *Compendium of TB Indicators*. Again, results were similar, with slightly more emphasis on neutrality. Ten respondents (25%) reported being very satisfied and 22 respondents (55%) were satisfied with the format and presentation. Eight respondents (20%) indicated that they were neutral in regards to the format and presentation. No respondents were dissatisfied. Results are shown in Figure 3.

Figure 3. Users' reported satisfaction with the format and presentation of the *Compendium of TB Indicators*.



The final scaled question asked the respondents the degree to which they are satisfied with the *Compendium of TB Indicators*, overall. Twelve respondents (29.2%) reported being very satisfied, 24 respondents (58.5%) reported being satisfied and five respondents (12.2%) were neutral. Again, there were no respondents who were dissatisfied. Results are shown in Figure 4.

Figure 4. Users' reported overall satisfaction with the *Compendium of TB Indicators*.



Feedback on the Compendium of TB Indicators

Suggestions for changes or improvements to the *Compendium of TB Indicators* came from the open-ended additional comment space following the four questions on usefulness and satisfaction and from open-ended questions regarding suggestions in both the online survey and telephone interview. In some instances, these comments or suggestions are not reflective of the intended purpose or actual contents of the *Compendium of TB Indicators*. This may reflect a lack of understanding or unfamiliarity with the *Compendium of TB Indicators*. As there were only 43 online survey respondents and nine telephone interview respondents who have or have used the *Compendium of TB Indicators*, qualitative responses themes for these questions were made from as few as two responses and no more than 10.

There were six instances in which the respondents indicated that the *Compendium of TB Indicators* is too technical for them or their colleagues. Six respondents also asked for indicators to be distinguished or categorized by level, priority, or data source; and six asked for it to be shorter or for an abridged version. Three respondents said that the *Compendium of TB Indicators* includes too many indicators. Three respondents explicitly supported a revision of the *Compendium of TB Indicators* and three requested translations (Russian, Spanish, and Portuguese). Two respondents suggested better means of distribution, particularly to the district-level. Two respondents asked for additional examples or exercises in calculating and using indicators and two asked for additional training opportunities on the use of the *Compendium of TB Indicators*. These results are summarized in Table 9.

Table 9. Suggestions for Improving the *Compendium of TB Indicators*

Suggestions or comments*	Number of responses
It is too technical for my or my colleagues' general use	6
Distinguish between types of indicators (priorities, levels, data sources)	6
Produce an abridged or shorter version	6
Too many indicators are included	3
Consider revising the <i>Compendium of TB Indicators</i>	3
Produce foreign language versions (Russian, Spanish, Portuguese)	3
Provide examples or exercises for indicator calculation	2
Improve distribution	2
Provide additional training opportunities	2

*Asked of online survey and phone interview respondents who have or have used the *Compendium of TB Indicators*. N=51.

Positive feedback on the *Compendium of TB Indicators* was more abundant. Ten respondents reported that the indicators and definitions are clear. Eight respondents described the *Compendium of TB Indicators* as comprehensive and six said that it serves as a framework or checklist for a NTP. Five indicated that they had used the introductory sections on M&E and five reported that the *Compendium of TB Indicators* had been helpful in the calculation of indicators. Four respondents reported that by standardizing indicators and terms, the *Compendium of TB Indicators* had facilitated their work with others. Three individuals said that the guide had introduced new or explained uncommonly-used indicators. The *Compendium of TB Indicators'* helpfulness in understanding the importance of indicators and in completing reports were each mentioned twice. Finally, two respondents praised its consistency with what is recommended elsewhere. These results are summarized in Table 10.

Table 10. Positive Feedback Regarding the *Compendium of TB Indicators*

Positive feedback regarding the <i>Compendium of TB Indicators</i> *	Number of responses
Definitions of indicators are clear	10
Comprehensive	8
Serves as a framework or checklist for a national tuberculosis program	6
Introductory sections on monitoring and evaluation is used	5
Helpful with calculating indicators	5
By standardizing definitions, has facilitated work with partners	4
Introduced new or explained uncommonly used indicators	3
Helpful in understanding importance of indicators	2
Useful in completing reports	2
Consistent with what is recommended elsewhere	2

*Asked of online survey and phone interview respondents who have or have used the *Compendium of TB Indicators*. N=51.

Selected quotes from the online survey:

- *[I never] had even this basic knowledge before, yet was running a TB program.*
- *The [Compendium of TB Indicators] is organized in a manner that can be used by TB experts who would enjoy to read it from A to Z and others can easily go to sections of their preference and benefit equally.*
- *It's important to introduce the indicators in the context of a training or actual program review to make it real for people. Then I think they would have a better sense of what indicators can do for them, and they would be more likely to use data for program improvement.*

The selection of indicators within the *Compendium of TB Indicators* was also addressed in the questionnaires. The nine telephone interview respondents who have or have used the *Compendium of TB Indicators* were asked which indicators they use most often. Responses were: treatment success rate (six responses); case detection rate (four responses); case notification rate (two responses); DOTS coverage (two responses); and unspecified TB/HIV indicators (two responses). Results can also be found in Table 11.

Table 11. Most Commonly Used Indicators

Responses to “Which indicators do you use most often?”*	Number of responses
Treatment success rate	6
Case detection rate	4
Case notification rate	2
DOTS coverage	2
Unspecified TB/HIV indicators	2

*Asked only of phone interview respondents who have or have used the *Compendium of TB Indicators*. N=9.

Respondents of both the telephone interviews and the online survey were asked which topics or indicators they considered to be missing from the *Compendium of TB Indicators*. Answers were grouped into topics for ease of reporting. In some instances, respondents requested additional, updated, or more detailed indicators on topics that are already covered in the *Compendium of TB Indicators*. The indicator most commonly cited for improvement was DOTS, or TB services, coverage, with five instances. The following topic areas were each mentioned four times for inclusion or improvement: multi-drug resistant tuberculosis (MDR-TB); behavior change communication (BCC) programming; and TB/HIV collaborative or surveillance activities. Mentioned three times each for inclusion or improvement were indicators related to advocacy, communication, and social mobilization (ACSM), TB-related stigma, local or community involvement, and development of the NTP. There were four additional topics areas that were mentioned only twice, and were as follows: pediatric TB, private sector involvement or public-private mix, laboratory and diagnostic (drug susceptibility testing), and cost-effectiveness or financial issues. In addition, 4 respondents replied that there are no indicators missing or inadequate. These results are summarized in Table 12.

Table 12. Indicator Topics Suggested for Inclusion or Improvement

Responses to “Please specify any indicators or topics that you use in your work which are missing from the <i>Compendium of TB Indicators</i> .”*	Number of responses
DOTS / TB services coverage	5
Multi-drug resistant tuberculosis	4
Behavior change communication	4
TB/HIV collaborative or surveillance activities	4
Advocacy, communication, and social mobilization	3
TB-related stigma	3
Local or community involvement	3
Development of national tuberculosis program	3
Pediatric tuberculosis	2
Private sector involvement / public-private mix	2
Laboratory and diagnostic, including drug susceptibility testing	2
Cost-effectiveness and financial issues	2
No indicators missing or inadequate	4

*Asked of online survey and phone interviews respondents who have or have used the *Compendium of TB Indicators*. N=51.

Selected quote from the online survey:

- *Some indicators should really be trashed. For example, DOTS coverage needs to be just doesn't cut it any more. There should be a better indicator to pick up the nuances of DOTS in a country. MDR-TB indicators need to be adapted to portray more than the yes/no.*

Other Sources of TB Control Guidance

Respondents were also asked about other sources of TB M&E guidance. Online survey respondents with and without the *Compendium of TB Indicators* were asked to select publications that they used from a list of selected comparable publications. All telephone interview respondents and online survey respondents without the *Compendium of TB Indicators* were also asked where they would search for additional guidance on TB-related M&E. For results reporting, all responses were categorized into specific publications or general sources of information (Web sites and other unspecified resources).

Nine comparable publications were listed in the online survey. Each of these publications was selected multiple times by respondents. Respondents, however, also added other comparable publications in their responses. Besides the inclusion of local TB control manuals, produced by individual countries or sub-regions, and which were mentioned 14 times as a source of guidance, only one other comparable publication was listed more than once, the WHO's *Treatment of TB: Guidelines for National Programs*¹⁵, which was listed twice.

Respondents without the *Compendium of TB Indicators* were most likely to use *The Stop TB Strategy*¹⁶ (32 responses, 54.2%) and the *TB Manual: National Tuberculosis Programme Guidelines*¹⁷ (31 responses, 52.5%). Twenty-two respondents (37.3%) reported using the WHO annual reports on tuberculosis control.¹⁸ The *TB Handbook*¹⁹ was reportedly used by 17 respondents (28.8%). Two guides that focus specifically on M&E, *A Guide to Monitoring and*

*Evaluation for Collaborative TB/HIV Activities*²⁰ and the Global Fund's *Monitoring and Evaluation Toolkit*²¹ were each used by 11 respondents (18.6%).

For respondents of the online survey who have or have used the *Compendium of TB Indicators*, the *M&E Guide for Collaborative TB/HIV Activities* was the most commonly selected source of guidance (29 responses, 69%). The *Stop TB Strategy* followed with 28 responses (66.7%). Twenty-three respondents (54.8%) reported using the *TB Manual: National Tuberculosis Programme Guidelines* and WHO annual reports on TB. Nineteen respondents (45.2%) reported using the *TB Handbook*. The Global Fund's *Monitoring and Evaluation Toolkit* was used by 14 respondents (33.3%). *Tuberculosis Control in Prisons: A Manual for Programme Managers*²² was used by 13 respondents (31%) and *Indicators for Monitoring National Drug Policies*²³ was used by five respondents (11.9%). These last two guides had been used by even fewer of the respondents who did not have or use the *Compendium of TB Indicators*, with nine respondents (15.3%) and one respondent (1.7%), respectively, using these publications.

Overall, respondents who reported that they did not have and had never used the *Compendium of TB Indicators* reported using a smaller average number of comparable publications in their work than those respondents who did have or had ever used the *Compendium of TB Indicators*, at 2.42 publications per respondent and 3.79 publications per respondent, respectively. Use of the comparable publications was also more evenly distributed across the listed publications for respondents with the *Compendium of TB Indicators* than for those without. The use of the two other indicator-based guides, the WHO's *A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities* and *Indicators for Monitoring National Drug Policies*, were especially tilted towards respondents with the *Compendium of TB Indicators*. These results are shown in Table 13.

Table 13. Reported Use of Selected Comparable Guides by Online Survey Respondents

Publication	Users of the <i>Compendium of TB Indicators</i>		Nonusers of the <i>Compendium of TB Indicators</i>	
	Number	Percentage	Number	Percentage
<i>A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities</i> (WHO, 2003)	29	69.0%	11	18.6%
<i>The TB Handbook</i> (WHO, 1998)	19	45.2%	17	28.8%
<i>Monitoring and Evaluation Toolkit: HIV/AIDS, TB, and Malaria</i> (Global Fund, 2006)	14	33.3%	11	18.6%
<i>TB Manual: National Tuberculosis Programme Guidelines</i> (UNION/WHO, 2001)	23	54.8%	31	52.5%
<i>Global Tuberculosis Control: Surveillance, Planning, Financing</i> (WHO, multiple years)	23	54.8%	22	37.3%
<i>The Stop TB Strategy</i> (WHO/Stop TB Partnership, 2006)	28	66.7%	32	54.2%
<i>Indicators for Monitoring National Drug Policies</i> (WHO, 1999)	5	11.9%	1	1.7%
<i>Tuberculosis Control in Prisons: A Manual for Programme Managers</i> (WHO/ICRC 2001)	13	31.0%	9	15.3%
Other	5	11.9%	9	15.3%
<i>Total Number of Respondents</i>	42	*	59	*

*Multiple responses were allowed. Thus, the sum of the percentages is greater than 100.

All respondents of the telephone interviews and respondents of the online survey who did not have and had not used the *Compendium of TB Indicators* were also asked where they would search for additional guidance on TB-related M&E. Responses were general in nature and could refer to Web sites, staff, publications, workshops, or other specific sources. The WHO was the most commonly cited resource with 20 responses, followed by the UNION with eight responses. The CDC, the Stop TB Partnership and the Internet were each mentioned by five respondents. The Japanese International Cooperation Agency was mentioned three times, while the U.K. Health Protection Agency, local sources, and colleagues were each mentioned twice. These results are summarized in Table 14.

Table 14. Reported Use of General Sources of Guidance for TB-Related M&E

Responses to “If you were looking for additional guidance on the monitoring and evaluation of tuberculosis programs, where would you search?”*	Number of responses
World Health Organization (WHO)	20
International Union Against Tuberculosis and Lung Disease (UNION)	8
U.S. Centers for Disease Control and Prevention (CDC)	5
Internet	5
The Stop TB Partnership	5
Japanese International Cooperation Agency	3
Colleagues	2
U.K. Health Protection Agency	2
Local sources	2

*Asked of online survey respondents who do not have and have not used the Compendium of TB Indicators and all phone interview respondents. N=74.

DISCUSSION

The *Compendium of TB Indicators* has been widely distributed and is quickly becoming available in a variety of languages. From the analysis of reach, it can be estimated that as many as 20,000 printed copies, CDs, and PDF files have been produced, distributed, and/or viewed. Nearly half (44%) of all identified potential users had a copy of the publication, and all of them reported using it. Over 90% of users reported sharing the *Compendium of TB Indicators*, or the knowledge that they had gained from it, and at least 80% reported satisfaction with the publication in 4 categories (usefulness, knowledge gained, format and presentation, and overall satisfaction). These results all indicate high levels of reach, use, and usefulness of the *Compendium of TB Indicators* and that users are generally satisfied.

Some of the results from the online survey and phone interviews indicated a divide in the ability of potential users to comprehend and effectively operationalize the *Compendium of TB Indicators*. Three of the most frequently reported items of negative feedback (suggestions) were nearly the opposite of three of the most frequently cited items of positive feedback. These items of feedback reflected the technicality of the guidance, the length of the publications, and the number of included indicators. There are, however, more respondents who offered positive rather than negative feedback on this aspect. This suggests that the overall complexity, in terms of difficulty and comprehensiveness, is too great for some, but appropriate for many potential users.

In addition, users of the *Compendium of TB Indicators* reported to be using a higher average number of comparable guides than nonusers, at 2.42 and 3.79 publications per respondent, respectively. Users were also more likely to be using other guides that focused on indicators than nonusers. This may also indicate a divide in the ability of TB program staff to comprehend and use an indicator-based M&E system, or in the complexity and level of TB programming and relevant M&E plans amongst different TB programs.

The online survey and phone interviews with users of the *Compendium of TB Indicators* raised awareness on a wide variety of topics for which indicators could be included or improved. With rapid expansion in the DOTS strategy, new indicators for reflecting DOTS coverage were suggested. And as programming expands to incorporate multidrug-resistant TB, collaborative TB/HIV activities, TB-related stigma, and ACSM, requests for indicators of these topics were also voiced.

REVIEW OF COMPARABLE TUBERCULOSIS RESOURCES

To identify other resources from which TB agencies could find guidance on TB control programming and M&E, and specifically the use of indicators, fifty-one publications, policy statements, reports, and courses were reviewed (Appendix F). Emphasis was placed on publications produced since 1998, though a few older publications that capture specific programming areas not covered by more recent editions were also included. Appendix F is not exhaustive of all possible publications related to TB, but attempts to capture a list of resources that health professionals may use in some of the same ways that the *Compendium of TB Indicators* is intended. Basic information is provided for each publication across a spreadsheet, including a short summary of its objectives. The spreadsheet also specifies for each publication its inclusion of M&E guidance, indicators, definitions, and reference to the *Compendium of TB Indicators*.

From this list, the comparable publications that include a list of indicators with definitions are of the greatest relevance. There are 17 that include both indicators and definitions. Three of these, however, are not focused on TB, but have indicators that could be applied to TB or include TB indicators along with other disease indicators. Another one of the 17 publications is an annual report rather than a manual or set of guidelines. The *Global Tuberculosis Control: Surveillance, Planning, Financing* reports are published annually by WHO and report on five key indicators for each country. Though the intent is not to provide guidance on how NTPs should calculate indicators, the introductory section describes in detail how the reported indicators, which are the key global reporting indicators, are calculated.

Other publications include lists of indicators with definitions, but focus on specific areas of TB programming. The topics that are included in these guides are pharmaceutical aspects, prison-based TB care, ACSM, public-private mix, cost-effectiveness, TB/HIV collaborative activities, and poverty integration. The potential user evaluations, however, indicated that these guides on specific topics may not be widely used, as evidenced by the low rates of use of the *Tuberculosis Control in Prisons: A Manual for Programme Managers*. There are also two publications that focus on collaborative TB/HIV programming, both of which include indicators with definitions. The WHO's *Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities* is heavily based on indicators and includes approximately 20 indicators with complete definitions and descriptions. This guide, produced in the same year as the *Compendium of TB Indicators*, is often recommended by other authors of M&E guidance, in addition to or instead of the *Compendium of TB Indicators*.

Three of the publications are facilitator and/or participant manuals for TB training courses rather than general guides. One is focused on TB/HIV collaboration and the other two are designed for district and health facility level staff, but include information on data collection and indicator calculation for five key indicators. The Global Fund's *M&E Toolkit* includes guidance on M&E of TB in addition to TB/HIV, HIV/AIDS and malaria programming. It supports indicator-based M&E and includes seven indicators with definitions, referring users to the *Compendium of TB Indicators* or the *M&E Guide for Collaborative TB/HIV* for additional indicators and guidance. The *Stop TB Strategy*, though a policy document, includes a short chapter on M&E with five key indicators defined. The *TB Manual* includes an appendix with definitions for seven indicators.

In short, there are other publications on TB control that list and define indicators, but they focus only on specific programmatic areas of TB, do not include more than a handful of indicators, and/or are not developed as a guidance tool. For example, three of the most commonly used and comparable publications are the Global Fund's *M&E Toolkit*, WHO's *TB Manual*, and WHO's *M&E Guide for Collaborative TB/HIV Activities*. The first two each contain only seven indicators. The third has the most indicators of any other publication besides the *Compendium of TB Indicators*, but is limited to TB/HIV programming. Thus, while the user surveys indicate a demand for additional indicators, there are no other comprehensive sources of indicators to which they can turn.

RECOMMENDATIONS

The following recommendations have been developed based on the results recorded in this assessment. They reflect suggestions for MEASURE Evaluation and its partners.

- **Offer additional training workshops or other interactive training opportunities for M&E skills alongside the distribution and provision of the *Compendium of TB Indicators*.**

The results of this assessment suggested a gap in the skills and abilities of some TB organizations to implement a complex indicator-based M&E system based on the mixed feedback regarding the overall complexity of the *Compendium of TB Indicators* and on respondents' use of other indicator-based guides. Several respondents requested additional training opportunities and for the inclusion of additional examples and exercises within future versions of the *Compendium of TB Indicators*. MEASURE Evaluation and other partners should further promote TB M&E workshops or technical assistance to ensure that TB managers and other staff have the M&E skills and knowledge to implement good M&E practices as put forth in documents such as the *Compendium of TB Indicators*.

- **Pursue the development of a second guide to capture specific programmatic aspects, including pediatric TB, ACSM, TB-related stigma, BCC, and other areas.** A substantial number of respondents (43%) requested specific topics in TB control for inclusion or improvement within the *Compendium of TB Indicators*, covering more than 12 areas. The analysis of comparable resources found that while the *Compendium of TB Indicators* provides general TB indicators, and the WHO's *Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities* provides TB/HIV indicators, there is no comparable publication that groups indicators and definitions across broader TB topics. As with the existing *Compendium of TB Indicators*, efforts should be made to ensure that any subsequent TB publications are made in partnership with other TB agencies and the WHO in particular. Their partnership is crucial to the distribution and acceptance of any new guidance.
- **Expand dissemination of the *Compendium of TB Indicators* in its various formats and languages.** TB program managers and M&E staff in all countries with a significant TB burden should have access to a copy in an appropriate language. Only five of the 11 NTP staff contacted in the phone interviews were aware of and using the publication. This is disappointing as it would be hoped that all NTP staff, especially those from English-speaking countries, as were contacted in the assessment, would have access to a copy of the publication, particularly as it has been distributed widely by WHO and is accessible via many websites. While high turnover among NTP staff may explain the absence of this publication from many NTP offices, it also reinforces the need for additional dissemination. In addition, NGOs are increasingly becoming involved in TB control, widening the circle of professionals who will need access to guidance and tools for TB M&E, such as the *Compendium of TB Indicators*. The CD and printed copy publication, along with the bookmark describing key indicators, are all good resources. Based on results of the survey and phone interviews, however, it can be estimated that only about half of individuals working directly on TB control and TB M&E have or have used the *Compendium of TB Indicators*.

REFERENCES

1 World Health Organization. (2004). *Compendium of indicators for monitoring and evaluating national tuberculosis programs* [WHO/HTM/TB/2004.344]. Geneva: World Health Organization.

2 Bertrand, J.T., & Escudero, G. (2002). *Compendium of indicators for evaluating reproductive health programs* [MEASURE evaluation manual series, no. 6]. University of North Carolina at Chapel Hill: Carolina Population Center.

3 LaFond, A., & Brown, L. (2003) *A guide to monitoring and evaluation of capacity-building interventions in the health sector in developing countries* [MEASURE evaluation manual series, no. 7]. University of North Carolina at Chapel Hill: Carolina Population Center.

4 Sullivan, T.M., Strachan, M., Timmons, B.K. & Rinehart, W. (2006) *Guide to Monitoring and Evaluating Information Products and Services* [Draft]. HIPNet.

⁵ USAID. (2002) *USAID Field Assessment of PHN Publications: Proposed Scope of Work*. Unpublished draft.

⁶ McConnell P. (Ed.). (1995). *Making a Difference: Measuring the Impact of Information on Development*. (Proceedings of a workshop; 1995 July 10-12; Ottawa, Canada) Ottawa: International Development Research Center.

⁷ Tuberculosis Working Group, CORE Group. (2006). *Tuberculosis Control Programming for PVOs* [Facilitator's Manual]. Washington, DC: CORE.

⁸ Moore T. (2005). *Trip Report: WHO TB Consultant Training in Sondalo, Italy 2005*. Submitted to USAID by RPM-Plus. Arlington, VA: Management Sciences for Health. Retrieved November 20, 2006, from USAID Development Experience Clearinghouse, from http://pdf.usaid.gov/pdf_docs/PDACH075.pdf

⁹ WHO. *Intercountry Workshop on TB Surveillance and Epidemiology held in the WHO Region for the Western Pacific Manila, Philippines, 4-7 May 2004*. Retrieved January 9, 2007, from http://www.who.int/docstore/gtb/meetings/wpro_workshop_may04/materials.htm

¹⁰ Stop TB listserv: <http://www.healthdev.org/eforums/cms/individual.asp?sid=105&sname=Stop-TB>

¹¹ Ainsworth, M., Vaillancourt, D.A., & Gaubatz, J.H. (2005). *Committing to results: improving the effectiveness of HIV/AIDS assistance: an OED evaluation of the World Bank's assistance for HIV/AIDS control*. Washington, DC: World Bank.

¹² Tuberculosis Working Group, CORE Group. (2006). *Tuberculosis Control Programming for PVOs* [Facilitator's Manual]. Washington, DC: CORE.

¹³ Moore T. (2005). *Trip Report: WHO TB Consultant Training in Sondalo, Italy 2005*. Submitted to USAID by RPM-Plus. Arlington, VA: Management Sciences for Health. Retrieved November 20, 2006, from USAID Development Experience Clearinghouse, from http://pdf.usaid.gov/pdf_docs/PDACH075.pdf

-
- ¹⁴ WHO. *Intercountry Workshop on TB Surveillance and Epidemiology held in the WHO Region for the Western Pacific Manila, Philippines, 4-7 May 2004*. Retrieved January 9, 2007, from http://www.who.int/docstore/gtb/meetings/wpro_workshop_may04/materials.htm
- ¹⁵ WHO. (2003). *Treatment of tuberculosis: guidelines for national programs* [WHO/CDSTB/2003.313] (3rd ed.). Geneva: World Health Organization.
- ¹⁶ WHO, & Stop TB Partnership. (2006). *The Stop TB Strategy* [WHO/HTM/TB/2006.368]. Geneva, World Health Organization.
- ¹⁷ UNION, & WHO. (2001). *TB Manual: National Tuberculosis Programme Guidelines*. Warsaw: The International Union Against Tuberculosis and Lung Disease.
- ¹⁸ WHO. (2006). *Global Tuberculosis Control: Surveillance, Planning, Financing: WHO Report 2006* [WHO/HTM/TB/2006.362]. Geneva, World Health Organization.
- ¹⁹ Pio, A. & Chaulet, P. (1998). *Tuberculosis Handbook*. Geneva: World Health Organization.
- ²⁰ WHO. (2004). *A guide to monitoring and evaluation for collaborative TB/HIV activities* [WHO/HTM/TB/2004.342, WHO/HIV/2004.09]. Field test version. Geneva: World Health Organization.
- ²¹ WHO, UNAIDS, The Global Fund to Fight AIDS, Tuberculosis, and Malaria, USAID, The World Bank, & UNICEF, et al. (2006). *Monitoring and Evaluation Toolkit: HIV/AIDS, TB, and Malaria* (2nd ed.). Geneva: The Global Fund to Fight AIDS, Tuberculosis, and Malaria.
- ²² WHO, & International Committee of the Red Cross. (2001). *Tuberculosis Control in Prisons: A Manual for Programme Managers* [WHO/CDS/TB/2001.281]. Geneva: World Health Organization.
- ²³ Brudon, P., Rainhorn, J-D., & Reich, M.R. (1999). *Indicators for Monitoring National Drug Policies*. (2nd ed.). Geneva: World Health Organization.

APPENDIX A: FINAL ONLINE SURVEY QUESTIONNAIRE

MEASURE Evaluation is inviting you to participate in a study on the reach and impact of the *Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs*, henceforth referred to as the *Compendium of TB Indicators*.

This guide was published in 2004 by a consortium of agencies led by the World Health Organization (WHO), the Stop TB Partnership, and MEASURE Evaluation. The *Compendium of TB Indicators* is available as a hard copy and as a PDF file from the WHO, MEASURE Evaluation, and many other websites. It has been taught at a number of trainings and workshops and recommended by agencies and resources worldwide.

To participate in the study, you would complete an online questionnaire. The questionnaire will take approximately 5 minutes to complete.

There are neither risks nor benefits anticipated should you participate in this study. You have the option to participate anonymously. All data obtained in this study will be reported as group data.

If you provide contact information, you may be called to request a phone interview. This interview will take approximately 20 minutes and will include additional questions about your work in tuberculosis monitoring, evaluation, reporting, and surveillance.

Contact information:

Contact information for withdrawal and specific questions can be sent to Lucy Wilson, by e-mail at lcwilson@email.unc.edu.

PAGE BREAK

The following questions refer to the *Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs*, henceforth referred to as the *Compendium of TB Indicators*.

Thank you for completing our survey.

1. Do you have or have you ever used the *Compendium of TB Indicators*?

Yes

No

IF NO, SKIP to Q27

PAGE BREAK

2. For your work, how often have you used the *Compendium of TB Indicators*, or information you have gained from the *Compendium*?

Often (more than 5 times)

A few times (1-5 times)

Never

3. Please tell us more.

4. Have you shared the *Compendium of TB Indicators*, or information from the *Compendium*, with other health professionals?

- Other (more than 5 times)
- A few times (1-5 times)
- Never

5. If so, how? To whom?

PAGE BREAK

6. I have gained knowledge and/or information from the *Compendium of TB Indicators*.

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. Please tell us more.

8. The *Compendium of TB Indicators* has been useful to my work or the work of my agency.

Strongly Agree Agree Neutral Disagree Strongly Disagree

9. Please tell us more.

PAGE BREAK

10. How satisfied are you with the format and presentation of the *Compendium of TB Indicators*?

Very Satisfied Satisfied Neutral Dissatisfied Very Dissatisfied

11. Please tell us more.

12. Overall, how satisfied are you with the *Compendium of TB Indicators*?

Very Satisfied Satisfied Neutral Dissatisfied Very Dissatisfied

13. Please tell us more.

PAGE BREAK

14. How have you used the *Compendium of TB Indicators*?

- Developing or revising M&E plan
- Standardizing indicators
- Training/ Teaching
- Research
- Informing policy and advocacy
- Other

15. If any of these, please specify.

16. Have you adapted the *Compendium of TB Indicators* to make it more useful to your context?

Yes

No

17. Please tell us more.

PAGE BREAK

18. Please specify any indicators or topics that you use in your work which are missing from the *Compendium of TB Indicators*.

19. Do you have any suggestions to make the *Compendium of TB Indicators* more useful or relevant to your work?

20. Do you use any of the following resources for guidance in your work? Please check all that apply.

A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities (WHO, 2003)

The TB Handbook (WHO, 1998)

Monitoring and Evaluation Toolkit: HIV/AIDS, TB, and Malaria (Global Fund, 2006)

TB Manual: National Tuberculosis Programme Guidelines (UNION/WHO, 2001)

Global Tuberculosis Control: Surveillance, Planning, Financing (WHO, multiple years)

The Stop TB Strategy (WHO/Stop TB Partnership, 2006)

Indicators for Monitoring National Drug Policies (WHO, 1999)

Tuberculosis Control in Prisons: A Manual for Programme Managers (WHO/ICRC 2001)

Other:

PAGE BREAK

21. In what region of the world are you located?

Asia/Near East

Sub-Saharan Africa

Europe/Eurasia

North America

Latin America/Caribbean

Australia/Western Pacific

22. What type of agency do you work for?

Ministry of Health

National Tuberculosis Program

UN Agency/Multilateral Aid Agency

Bilateral Aid Agency

International NGO

Local NGO

Medical Institution/Hospital

Private Sector/Private Health Facility

Academic Institution
Self-employed
Other

23. If you are willing to refer a colleague working in tuberculosis to our survey, please provide his/her name and/or email address below.

PAGE BREAK

24. Do you work or consult for a national tuberculosis program?

Yes
No

25. Would you be willing to complete a 20-minute phone interview about your work in tuberculosis monitoring, evaluation, reporting, and/or surveillance?

Yes
No

26. If so, please complete the following contact information.

Name:

Agency:

Email Address:

Phone Number:

Phone Number:

END OF QUESTIONS, SKIP TO THANK YOU

PAGE BREAK

IF NO....

27. Do you work in tuberculosis control or in the monitoring and evaluation of health programs?

Yes
No

28. Would a list of indicators, along with definitions, for tuberculosis program monitoring and evaluation be useful to your work?

Yes, this would be useful.
No, we are satisfied with our M&E plan.
No, this is not in my scope of work.

PAGE BREAK

29. Do you use any of the following resources for guidance in your work? Please check all that apply.

A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities (WHO, 2003)
The TB Handbook (WHO, 1998)
Monitoring and Evaluation Toolkit: HIV/AIDS, TB, and Malaria (Global Fund, 2006)
TB Manual: National Tuberculosis Programme Guidelines (UNION/WHO, 2001)

Global Tuberculosis Control: Surveillance, Planning, Financing (WHO, multiple years)
The Stop TB Strategy (WHO/Stop TB Partnership, 2006)
Indicators for Monitoring National Drug Policies (WHO, 1999)
Tuberculosis Control in Prisons: A Manual for Programme Managers (WHO/ICRC 2001)
Other:

30. If you were looking for additional guidance on the monitoring and evaluation of tuberculosis programs, where would you search?

PAGE BREAK

31. In which region of the world are you located?

Asia/Near East
Sub-Saharan Africa
Europe/Eurasia
North America
Latin America/Caribbean
Australia/Western Pacific

32. What type of agency do you work for?

Ministry of Health
National Tuberculosis Program
UN Agency/Multilateral Aid Agency
Bilateral Aid Agency
International NGO
Local NGO
Medical Institution/Hospital
Private Sector/Private Health Facility
Academic Institution
Self-employed
Other

33. If you are willing to refer a colleague working in tuberculosis to our survey, please provide his/her name and/or email address below.

PAGE BREAK

34. Would you be willing to complete a 20-minute phone interview about your work in tuberculosis monitoring, evaluation, reporting, and/or surveillance?

Yes
No

35. If so, please complete the following contact information.

Name:

Agency:

Email Address:

Phone Number:

Phone Number:

PAGE BREAK

THANK YOU

Thank you for participating in our survey!

MEASURE Evaluation
<http://www.cpc.unc.edu/measure>

Compendium of TB Indicators available at:
<http://www.cpc.unc.edu/measure/publications/pdf/ms-04-11.pdf>

And in Spanish at:
<http://www.cpc.unc.edu/measure/publications/pdf/ms-04-11-es.pdf>

APPENDIX B: FINAL PHONE INTERVIEW QUESTIONNAIRE

Greetings, my name is Lucy Wilson and I am working with MEASURE Evaluation on an assessment of a publication entitled the *Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs*. This technical guide was published in August 2004 by a consortium of agencies led by the Stop TB Partnership of the World Health Organization, MEASURE Evaluation, and the U.S. Agency for International Development (USAID).

I'd like to ask you a few questions about your work on the monitoring and evaluation of TB programs and your use of this publication. Do you have 10-20 minutes to answer my questions?

*Has respondent completed the online survey? If no, start at #1. If yes, skip questions with *.

1. *Are you aware of this publication, the *Compendium of TB Indicators*?
2. Do you have a hard copy or the PDF version, or both? If no to #1&2, skip to #13.
3. Where did you receive or obtain the *Compendium of TB Indicators*?
4. *Have you ever used the *Compendium of TB Indicators*?
5. *How have you used the *Compendium of TB Indicators*? (ex. designing and implementing M&E programs, research, policy or advocacy, teaching or training)
6. *How do you find the *Compendium of TB Indicators* in terms of organization and ease of use?
7. *Has the *Compendium of TB Indicators* been useful to your work?
 - a. How? Or Why not?
8. Has the introductory section on M&E practice been useful? How?
9. Which indicators do you use the most?
10. *Which indicators or topics do you use in your work that are missing from the *Compendium of TB Indicators*?
11. *Have you or your agency ever adapted the *Compendium of TB Indicators* for use in your work? If yes, why was it adapted? Can you give us some examples?
12. Do you have any suggestions to improve the *Compendium of TB Indicators*?
13. *What resources do you use for guidance on TB-related monitoring and evaluation work?
14. If you were looking for information on TB-related M&E beyond the resources that you currently use, where would you search?
15. Does the national tuberculosis program in your have monitoring and evaluation plan?
16. Does the monitoring and evaluation plan use standardized indicators?
17. How were the indicators selected?
18. What resources were used in that process?
19. How often are the chosen indicators reevaluated?
20. Does the M&E plan use standardized reporting forms?
21. Does your NTP have a centralized data reporting mechanism?
22. Does your NTP distribute annual or quarterly reports?
23. Does your NTP have a mechanism to provide feedback to district-level programs?

APPENDIX C – SELECTED QUOTES FROM POTENTIAL USER EVALUATIONS

Use of the Compendium of TB Indicators:

I used [the Compendium of TB Indicators] more than five times on 2005 and 2006 in many great activities: Reviewed and up-dated our national program guide in February, up-dated manuals of training of all workers (physicians, nurses, public health workers) of tuberculosis in the country. And when we elaborated our Strategic Plan for five years (2006-2010) in June 2005.

I use the [Compendium of TB Indicators] every time I need clear information about a highly specific indicator (definitions, what is measures, ...) or M&E terms, usually with the occasion of preparing proposals, workplans, and others ...

Development of indicators for food-based programs.

Yes [I share the Compendium of TB Indicators] on daily basis with colleagues and during monthly and quarterly meetings with DTO and STO and with health visitors, lab technicians, senior treatment supervisors, and senior lab supervisors.

In Namibia, the TB program is conducting district TB review meetings where TB focal persons discuss TB data for specific cohorts/periods. We use the [Compendium of TB Indicators] to show them how to calculate TB cure rate, completion rate, default rate, etc.

We distribute the copy of the [Compendium of TB Indicators] to the participants during the training/ workshops. Apart from that, we always tell the partners, please look at the [Compendium of TB Indicators] when we say/discuss about TB indicators for monitoring and evaluating TB program performance. [from an NTP manager]

Feedback on the Compendium of TB Indicators:

[I never] had even this basic knowledge before, yet was running a TB program.

The [Compendium of TB Indicators] is organized in a manner that can be used by TB experts who would enjoy to read it from A to Z and others can easily go to sections of their preference and benefit equally.

I found a number of indicators there which I did not think about previously. I also refreshed my memory how some of the indicators are calculated.

It is good to have reference book at your desk, especially when you need clarifications on different indicators. It is very useful. However, it could be more useful to clarify different indicators per different level of TB system: national, oblast and district.

The book has helped me to be more effective in explaining the importance of the indicators for treatment outcome for the explanations are clear and easy to understand.

The compendium lacks indication of priority: key and general indicators of program performance are mixed with more specific or less important indicators. Better, more clear (although less comprehensive) documents are available.

It covers all the mandatory fields which are required for preparing reports and knowing the overall performance

It's a bit overwhelming for many people, I think, because there are so many indicators described. Some people are likely to take one look and think it is too much work. You do have the key indicators list at the back--I would move it to the front so it's clear that everyone doesn't have to measure every indicator.

[There are] no practical exercises and examples of source of information (recording and reporting forms) in the Compendium of TB Indicators. [There are] poor explanations and bases for targets. For example, why main NTP targets should be 70/85, and how to calculate 70% target for the specific region.

It's important to introduce the indicators in the context of a training or actual program review to make it real for people. Then I think they would have a better sense of what indicators can do for them, and they would be more likely to use data for program improvement.

Overall a very good document but would like to see it updated with some reference to current WHO guidelines on DOTS and [MDR-TB.]

I have no words. It is a format that has to be adapted/adopted by other programs!!!!!!

Some indicators should really be trashed. For example, DOTS coverage needs to be just doesn't cut it any more. There should be a better indicator to pick up the nuances of DOTS in a country. MDR-TB indicators needs to be adapted to portray more than the yes/no.

Agency	Address of PDF files	PDF views history, as available	Average PDF views per month	Internal Link	External Link	External Link	External Link	External Link	External Link	External Link	External Link
MEASURE Evaluation	http://www.cpc.unc.edu/measure/publications/pdf/ms-04-11.pdf	English: 2006 – 6065 views; Spanish: Sept-Dec 2006 – 307 views	English: 505.4 views per month; Spanish: 88	http://www.cpc.unc.edu/measure/publications/index.php	USAID http://www.usaid.gov/our_work/global_health	POPLINE. Document# 279465 RECHECK	INFO Project – One Source Document# 279465				
WHO	http://whqlibdoc.who.int/hq/2004/WHO_HTM_TB_2004_344.pdf (Available	Apr 2006 (partial month) - 33; May 2006 - 130; June 2006 - 115; Jul 2006	121.3 views per month	http://www.who.int/tb/publications/tb_compendium_of_indicator	MSH http://www.msh.org/what_MSH_does/tb/m	ELDIS http://www.eldis.org/static/DOC18539.htm	Free Science (123 hits as of Dec.27, 2006) http://www.free-science.org/	Biblioteca Virtual em Saude (BVS) http://www.bvs.br/	PDF version of PVO TRM:TB http://www.pvo.org/	TB Virtual Reference Center http://www.tbvirtual.org/	TB Education & Training Resources (CDC)
USAID	http://pdf.usaid.gov/pdf_docs/PNADB608.pdf	No response		http://dec.usaid.gov/index.cfm?search.getCitati&CFID=5101							
MSH - RPM Plus	http://www.msh.org/projects/rpmplus/pdf/TB/Compendium_Indicators_ME	Oct–Dec '05 - 16; Jan-Mar '06 - 19; Apr-Jun '06 - 17; Jul–Sep '06 - 19;	7.9 views per month	http://www.msh.org/projects/rpmplus/7.0.htm							
STOP TB Partnership	http://www.stoptb.org/wg/advocacy_communication/assets/documents/Com	3,591 downloads from Jan 1, 2006 to Nov. 3, 2006	359 views per month	http://www.stoptb.org/wg/advocacy_communication/suptools.asp							
OPAS – Pan-American Health Organization	http://www.opas.org.br/informacao/UplodArq/Compendium.pdf	No response		http://www.opas.org.br/informacao/temas_documentos_detalhe.cfm							
Wageningen International	http://portals.wi.wur.nl/files/docs/ppme/TB_Compndium_WHO.pdf	No response		http://portals.wi.wur.nl/ppme/?page=2140							
CORE Group	http://www.coregroup.org/working_groups/TB_Compndium_WHO.pdf	No response		http://www.coregroup.org/working_groups/tb.cfm	Wageningen International http://portals.wi.wur.nl/ppm						
TBCTA	http://www.tbcta.org/Publications/Compendium%20of%20Indicators%20for	No response		http://www.tbcta.org/Pages/publications.php							
WHO (TB M&E Surveillance Workshop)	http://www.who.int/tb/surveillanceworkshop/documents/WHO_Compndium	Word document – draft version Did not request		http://www.who.int/tb/surveillanceworkshop/bibliography/default							

APPENDIX E: LIST OF PLACES WHERE *COMPENDIUM OF TB INDICATORS* IS REFERENCED

Listed on websites:

ELDIS: The Gateway to Development Information (www.eldis.org) has an entry for the *Compendium of TB Indicators* with a (nonworking) link to the WHO PDF file. It is highlighted as a “recommended resource” in the TB/Health Resources list.

Population, Health, and Nutrition Information Project (PHNIP) www.phnip.com has link to the WHO PDF file from a “List of Web Resources” in its “World TB Day Outreach Toolkit/CD-ROM” http://www.phnip.com/portfolio/tb_toolkit/files/ListWebRsrcs.pdf

The Tuberculosis Virtual Resource Center (TBVRC) www.tbvrc.org, a project of the CORE Group, USAID, CSTS+ ORC Macro Link has links to the WHO PDF file as a “quick link” and under “Drug Resistance/ DOTS-Plus_Program Management” and but not as a selection under “Monitoring/Supervision”. Links to English (WHO) and Spanish (MEASURE) PDFs of *Compendium* are available under “Epidemiology / Surveillance / Monitoring and Evaluation” and “TB Program Management _National Program Management”. Website is under improvement, but many links remain broken.

Listed in bibliography as a background document for WHO TB Epidemiology and Surveillance Virtual Workshop. DRAFT *Compendium* available for download as Word document. <http://www.who.int/tb/surveillanceworkshop/bibliography/default.htm>

Referenced in documents:

Referenced and recommended in “Monitoring and Evaluation for Global Fund Applicants”, a PowerPoint presentation by Dan Bleed, Udo Buchholz, Chris Dye, Katherine Floyd, Mehran Hosseini, and Brian Williams. TB M&E Team, Stop TB Dept WHO: GF Round 5 Preparations Workshop: Geneva, Feb 23, 2005; from WHO TB Epidemiology and Surveillance Virtual Workshop www.who.int/tb/surveillanceworkshop/documents/M+E%20for%20Global%20Fund%20applications.ppt

Referenced in “Control of TB: Analytical Methods”, a PowerPoint presentation by Udo Buchholz, WHO/Stop TB/TME; from WHO TB Epidemiology and Surveillance Virtual Workshop www.who.int/tb/surveillanceworkshop/documents/Control_of_TB_analytical_methods_Udo%20Buchholz.ppt

Referenced in “Planning Framework: Monitoring and evaluation system, and impact measurement”, Stop TB Department, World Health Organization, May 2006 - working draft. www.who.int/tb/dots/planningframeworks/monitoring&evaluationplanningframework_may06.doc

Referenced in “M&E of National TB Program: Republic of Moldova”, a PowerPoint presentation by Mihai Ciocanu, MD, PhD and Otilia Scutelnicu, MD of the Scientific Practical Centre of Public Health and Management, Chisinau, Republic of Moldova; from Regional Conference on Public Health “Balkan Medicine towards FP7” Romania, 4-5 May 2006.
http://www.snsrms.ro/bmt2006/files/w2-05_Otilia%20Scutelnicu.pdf

Referenced and Recommended in USAID, PVO Child Survival and Health Grants Program: Technical Reference Materials: Tuberculosis; includes a link to WHO PDF file.
http://www.coregroup.org/working_groups/TRM_Tuberculosis_2005.pdf

Referenced and Recommended in USAID: Request for Applications (RFA) for Child Survival and Health Grants FY2007. Contains link to WHO PDF file.
<http://apply.grants.gov/opportunities/instructions/oppM-OAA-GH-07-003-cfda98.001-instructions.pdf> –

Listed in Africa Bureau’s “USAID Publications on Africa: 2002 to Present”
http://www.usaid.gov/locations/sub-saharan_africa/publications/docs/publist05.pdf

TBCTA Annual Report APA3 FY03 mentions development of *Compendium of TB Indicators: The current group of indicators used by TBCTA is too general to monitor the TBCTA specific activities at country level. TBCTA partners are involved in the development of a “Compendium of Indicators for Monitoring and Evaluation National TB programmes. When this Compendium becomes available, country specific indicators will be selected to closer measure progress on TBCTA's work toward global DOTS expansion.*
www.tbcta.org/Publications/Report%20APA3%20-%20Final.doc

Cited in articles:

Cited in an article in Turkish by Mik.Uzm.Dr.İsmail Ceyhan, RSHMB, Tüberküloz Referans ve Araş. Lab. Şefi.
www.rshm.gov.tr/sbdialog/aer/cilt4-2005/4-2-2005-AER.doc

Cited in: Memoria 2001-2006: Ministerio de Salud; Minsa; USAID Peru
<http://www.minsa.gob.pe/portal/gestion/Archivos/Memoria%20Institucional%20MINSA%2001-2006.pdf>

Cited in: Bumburidi E, Ajeilat S, Dadu A, et al. Progress towards Tuberculosis Control and Determinants of Treatment Outcomes – Kazakhstan, 2000-2002. In: Global Epidemiology: proceedings of the third TEPHINET Conference – Beijing, China. MMWR Morb Mortal Wkly Rep 2006 Apr 28; 55(suppl): 11-15.
<http://www.cdc.gov/mmwr/preview/mmwrhtml/su5501a4.htm>

Cited in: Rookkapan K. Refocus on the stability and quality of anti-tuberculosis formulations - Reply [Correspondence] Int J Tuberc Lung Dis 2006 Sep;10 (9):1065.
<http://www.ingentaconnect.com/content/iatld/ijtld/2006/00000010/00000009/art00023>

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>Global Tuberculosis Control: Surveillance, Planning, Financing</i>	WHO	2006, 2005, etc.		Annual Report	http://www.who.int/tb/publications/global_report/2006/pdf/full_report_correctedversion.pdf	Annual report on TB from WHO. Covers methods, results, conclusions and has an annex reporting on indicators for all countries.	n	y	y	n	n	Reports on 5 key indicators in the context of MDGs. Defines and describes in depth how indicators are calculated. As it covers important indicators, NTPs use it for guidance, though that is not the purpose.
<i>Monitoring and Evaluation Toolkit: HIV/AIDS, TB, and Malaria (2nd ed)</i>	Global Fund	2006	MEASURE, WHO, WB, CDC, UNAIDS, USAID, UNICEF, etc.	Guide, M&E	http://www.theglobalfund.org/pdf/guidelines/pp_me_toolkit_en.pdf	Purpose: to present M&E framework, gather selected standard indicators, and provide references to additional resources on M&E for HIV, TB, malaria.	y	y	y	y	y	Strongly based on indicators, with 7 TB indicators listed in chapters and defined in annex. Highly recommends <i>Compendium of TB Indicators</i> and <i>M&E Guide for Collab TB/HIV</i> .
<i>Engaging all Health Care Providers in TB Control: Guidance on Implementing Public-Private Mix Approaches</i>	WHO	2006	M.Uplekar, K.Lonnroth	Guide, PPM	http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.360_eng.pdf	Guidance for NTPs on engaging all relevant health care providers in TB control.	y	y	y	n	n	Table 2 (p.23) list and defines indicators specific to measure PPM. Mostly stratifies existing indicators for private involvement.
<i>The Stop TB Strategy</i>	WHO/ STBP	2006	M.Uplekar, J.Figueroa-Munoz, K.Floyd, H.Getahun,	Policy, General	http://www.who.int/tb/publications/2006/who_htm_tb_2006_368.pdf	Sets out the steps that NTPs and their partners need to take. Includes vision, goal, objectives, targets, indicators, plus 6 major components and M&E plan.	y	y	y	n	n	Organized MDG-style. 2 page chapter on M&E - lists 5 indicators with target, source. Recommends <i>M&E Guide for Collab TB/HIV</i> .
<i>TB Control Programming for PVOs: Facilitators' Manual</i>	CORE Group	2006	L.Adams, D.Churian, A.Dev, A.Hendrix-	Course, General	http://pdf.dec.org/pdf_docs/Pn adg190.pdf	Training course guide for PVOs hoping to start TB programs. Used at Millwood in Oct. 04 and Chennai, India '06.	y	n	n	y	y	Includes <i>Compendium of TB Indicators</i> as key course material, all reference to indicators refer to <i>Compendium of TB Indicators</i> .
<i>International Standards for Tuberculosis Care</i>	TBCTA	2006		Guide, Clinical	http://www.who.int/tb/publications/2006/istc_report.pdf	Purpose is to describe a widely accepted level of care that all practitioners should seek to achieve in managing TB patients.	n	n	n	n	n	Entirely clinical, no M&E except as individual clinical care reflects on reporting.
<i>Guidelines for National Tuberculosis Programs on the Management of Tuberculosis in Children</i>	WHO	2006		Guide, General	http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.371_eng.pdf	Guidance to fill the gaps in the existing materials regarding the implementation of tuberculosis care and control programs care for children.	y	y	n	n	n	Sec 5: Recording and Reporting, suggests a sample list of indicators for specifically evaluating childhood TB.

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>Revised TB Recording and Reporting Forms and Registries - version 2006</i>	WHO / KNCV	2006	K.Laserson, R.L'Hermine z, PYNorval, A.Trébuqc	Guide, M&E	http://www.who.int/tb/dots/r_and_r_forms/en/index.html	Not guidelines, but notice of changes to TB recording forms and registries, launched Oct 06 and in process of dissemination to NTPs. Guidelines will be included in next versions of TB Handbook and two TB courses.	y	n	n	y	n	No guidance on indicators, but on collecting the basic data from which indicators are built. Has changed "district" to "Basic Management Union" because of corresponding wording in <i>Compendium of TB Indicators</i> .
<i>Guidelines for the Programmatic Management of Drug-Resistant TB</i>	WHO	2006	M.Rich, P.Cegielski, E.Jaramillo, K.Lambregts	Guide, M&E	http://whqlibdoc.who.int/publications/2006/9241546956_eng.pdf	Recommendations for NTPs and medical workers with MDR-TB. Replaces Guidelines for the mgmt of DR-TB (WHO1996) and Guidelines for establishing DOTS-Plus for MDR-TB (WHO2000).	y	y	n	n	n	Ch.18: Recording &Reporting, emphasis on registries
<i>Global Plan to Stop TB: 2006-2015</i>	WHO	2006		Policy, General	http://www.stoptb.org/globalplan/assets/documents/GlobalPlanFinal.pdf	Policy document: global plan to stop TB. Deals with commitments, broad goals and strategies.	y	n	n	n	n	No mention of <i>Compendium of TB Indicators</i> , no guidance on M&E, just acknowledgement that it needs to happen.
<i>DOTS Expansion Working Group strategic plan 2006-2015</i>	WHO / STBP	2006		Policy, General	http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.370_eng.pdf	An addition to the Global Plan to Stop TB that focuses on one working group's activities. Outlines activities in support of Global Plan.	y	n	n	n	n	"New indicators and methods need to be developed in order to specifically measure the impact of DEWG activities on equity of access, diagnostic delay and financial protection for the poor."
<i>Strategic Approach for the Strengthening of Laboratory Services for Tuberculosis Control, 2006-2009</i>	WHO	2006	M.Aziz, K.Ryszewsk a, A.Laszlo, L.Blanc	Policy, Labs	http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.364_eng.pdf	Global strategy for the development and strengthening of TB lab networks. Calls for this, gives broad guidance. Not a manual.	y	n	n	n	n	Only broad call for M&E and use of indicators. No list, no definition, no mention of <i>Compendium of TB Indicators</i> or other guides.
<i>Management of Collaborative TB/HIV Activities: Training for managers at the national and subnational levels</i>	WHO	2005		Course, General	http://www.who.int/tb/publications/who_htm_tb_2005_359/en/index.html	Goal of this training course is to further develop the skills of NTP staff at the national and district level required to plan and implement collaborative TB/HIV activities based on WHO strategies.	y	y	y	n	n	Unit 12 focuses on M&E of collaborative activities, uses and recommends indicators. Uses <i>M&E Guide for Collab TB/HIV</i> as a resource, not <i>Compendium of TB Indicators</i> .
<i>Management of TB: Training for District TB Coordinators</i>	WHO	2005	K.Bergstrom, M.Grzemska, F. Luelmo, F.Johnson, P.White sell	Course, General	http://www.who.int/tb/publications/who_htm_tb_2005_347_modules_a_n/en/index.html	Course available on Internet, CD-ROM. "Teaches the skills and knowledge to plan, supervise, implement, monitor, and evaluate the activities of a district TB programme."	y	y	y	n	n	Module G on M&E teaches how to collect data and calculated five indicators at the district level. Does not reference <i>Compendium of TB Indicators</i> .

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>Addressing Poverty in TB Control: Options for National TB Control Programmes</i>	WHO	2005	L.Singh Chauhan, M.Dara, J.Figueroa-Munoz, C.Hanson, I.Martinez	Guide, M&E, Poverty	http://whqlibdoc.who.int/hq/2005/WHO_HTM_TB_2005.352.pdf	Guidance for NTPs on integrating pro-poor measures. Answers 6 questions on implementing of pro-poor, including impact.	y	y	y	y	y	Ch 6: M&E of pro-poor TB measures. Argues for indicators that take into account poverty measures. Acknowledges <i>Compendium of TB Indicators</i> for doing so.
<i>Technical Reference Materials: Tuberculosis. PVO Child Survival and Health Grants Program</i>	USAID	2005		Guide, General	http://www.coregroup.org/working_groups/TRM_Tuberculosis_2005.pdf	Simple guide to help PVOs think through TB as an area of technical assistance. A reference for planning and implementation. Provides reference to more technical materials.	y	n	n	y	y	Recommends <i>Compendium of TB Indicators</i> in short section on M&E, p.20-21. Has link to WHO file.
<i>A Guide to Developing a TB Program Evaluation Plan</i>	CDC	2005	N/A	Guide, M&E	http://www.cdc.gov/nchstp/tb/Program_Evaluation/default.htm	Intended to help (domestic) TB program staff develop and write an evaluation plan. Basic M&E concepts, sample evaluation plan. Plus Webinar courses on TB program evaluation.	y	y	n	n	n	Provides template for evaluation plan, includes indicators. Describes how to write and organize data collection for indicators, p.23-27, 41-43. Annex D provides sample list of indicators. Reference is to California TB Indicator Project.
<i>Managing Pharmaceuticals and Commodities for TB: A Guide for NTPs (revised 2005)</i>	MSH	2005	E.Barillas, A.Beith, R.Burn, S.Mookherji, T.Moore, C.Owunna, P.G.Suarez, A.Zagorskiy	Guide, Pharma	http://www.msh.org/what_MSH_does/tb/pdf/Guide_for_National_Tuberculosis_Programs.pdf	For NTPs, provides a step-by-step approach reviewing the critical areas of pharmaceutical management for TB. Users should be able to identify key weaknesses and mechanisms to overcome weaknesses.	y	y	n	y	n	Sections 5.5, 5.6, Annex 5.2 deal with indicator-based M&E, including importance of indicators and list of TB pharma mgmt indicators. Refers to <i>Pharma Mgmt for TB Assessment</i> . <i>Compendium of TB Indicators</i> is a reference.
<i>The President's Emergency Plan for AIDS Relief Indicators, Reporting Requirements, and Guidelines</i>	USAID	2004		Guide, AIDS, M&E	http://www.coregroup.org/working_groups/PEPFAR_Indicators_041404.pdf	Requirements for reporting for PEPFAR.	y	y	y	n	n	M&E guide for USAID/PEPFAR-funded projects working on AIDS, but also includes indicators on collaborative TB/HIV.
<i>A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities</i>	WHO	2004	A.Reid, H.Ayles, A.Bloom, M.van Cleeff, E.Eckert, A.Giphart, A.Loth	Guide, M&E; TB/HIV	http://whqlibdoc.who.int/hq/2004/WHO_HTM_TB_2004.342.pdf	Developed to assist in the management of TB and HIV/AIDS collaborative activities. Intends to facilitate collection, interpretation, and dissemination of collaborative data, via standardized TB/HIV indicators.	y	y	y	n	n	M&E guide based on indicators, and including at least 20 thoroughly defined indicators, focused on TB/HIV. Mentions existence of a compendium of indicators for TB, but not by name.
<i>Pharmaceutical Management for Tuberculosis: Assessment Manual (revised edition)</i>	MSH / USAID	2004	A.Zagorskiy, C.Owunna, T.Moore	Guide, Pharma	http://pdf.dec.org/pdf_docs/Pnacdc952.pdf	Guide for NTPs and partners to assess the pharmaceutical aspects of a TB program. Takes users step-by-step through the NTP pharmaceutical management process.	y	y	y	y	y	Recommends <i>Compendium of TB Indicators</i> in introduction. Indicators specific to pharmaceutical, not consistent with those in <i>Compendium of TB Indicators</i> .

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>Toman's Tuberculosis: Case Detection, Treatment, and Monitoring: Questions and Answers (2nd ed)</i>	WHO	2004	T.Frieden	Guide, Clinical	http://whqlibdoc.who.int/publications/2004/9241546034.pdf	Q&A format, reference book on TB diagnosis and treatment, including effective TB control strategies. Contains the scientific basis for WHO/UNION strategy for TB control.	y	y	n	n	n	Question #71 includes basic indicators and a rationale behind them.
<i>Guidelines for HIV Surveillance among Tuberculosis Patients (2nd ed)</i>	WHO / UNAIDS	2004	E.Duffell, I.Toskin	Guide, TB/HIV	http://whqlibdoc.who.int/hq/2004/WHO_HTM_TB_2004.339.pdf	Guidelines on methods for HIV prevalence / surveillance among TB patients. For both NTPs and NACPs, as routine, sentinel, or sporadic testing/surveillance.	n	n	n	n	n	Evaluation only in the context of surveillance.
<i>Interim Policy on Collaborative TB/HIV Activities</i>	WHO	2004	H.Getahun, J.vanGorkum, A.Harries, M.Harrington	Policy, TB/HIV	http://whqlibdoc.who.int/hq/2004/WHO_HTM_TB_2004.330_eng.pdf	Short policy statement for countries on when and how to collaborate TB/HIV activities.	n	n	n	n	n	M&E of collaborative activities is key recommendation, but refers to <i>M&E Guide for Collab TB/HIV</i> .
<i>Management of TB Training for Health Facility Staff</i>	WHO, others	2003	K.Bergstrom; F.Luelmo	Course, Clinical	http://www.who.int/tb/publications/who_cds_tb_2003_314/en/index.html	Multi-module course for health workers responsible for detecting and treating TB patients, very clinical, but contains section on monitoring at level of health facility (Module H).	y	y	y	n	n	Has a section (Module H) on teaching health facility staff how to collect data for the calculation of five indicators.
<i>Developing Social Mobilization and Communication Indicators for Use in TB Programme Monitoring: A working document</i>	WHO	2003	W.Parks	Guide, M&E	http://www.stoptb.org/wg/advocacy_communication/assets/documents/Developing%20Indicators%20for%20Social%20Mobilization.pdf	Only in draft form: A short document arguing for soc mobilization indicators for DOTS. Discusses indicator development and has a list of suggested indicators with simple definitions.	y	y	y	y	n	Mentions ongoing work on <i>Compendium of TB Indicators</i> ; critiques it for its exclusion of social mobilization indicators of progress towards behavioral goals. Simple list, definition, calculation of suggested indicators.
<i>Treatment of TB: Guidelines for National Programs (3rd ed)</i>	WHO	2003		Guide, Clinical	http://whqlibdoc.who.int/hq/2003/WHO_CDS_TB_2003.313_eng.pdf	Guidelines covering the treatment of TB patients, including TB/HIV, MDR-TB, extrapulmonary TB, etc. For NTPs and medical officers making TB treatment policy.	n	n	n	n	n	Mentions indicators for DOTS implementation, but mostly focuses on clinical aspects - from a policy perspective
<i>Guidelines for Surveillance of Drug-Resistance in Tuberculosis</i>	WHO	2003	M.Aziz, A.Laszlo, M.Raviglione, H.Rieder, M.Espinal, A.Wright	Guide, General	http://whqlibdoc.who.int/publications/2003/9241546336.pdf	Guidelines to assist NTPs in developing drug resistance surveillance systems as a means of monitoring the prevalence of MDR-TB and efficient management of the NTP. Replaces 1997 ed.	y	y	n	n	n	Proposes surveillance of drug-resistant TB through prevalence surveys as a means of evaluating the effectiveness of a TB program. Mentions indicators, but no clear guidance on indicators.

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>Guidelines for Implementing Collaborative HIV and TB Program Activities</i>	WHO	2003	N.Hargreaves, F.Scano, c/o Global TB/HIV Working Group	Guide, TB/HIV	http://whqlibdoc.who.int/hq/2003/WHO_CDS_TB_2003.319.pdf	Guide to enable NTPs and NACPs to support districts to plan, coordinate, and implement collaborative TB/HIV activities: what, how, and by whom.	y	y	n	n	n	Only very basic M&E information. Short list of indicators, p.33. Implementing-activity boxed include a section on data collection which suggests indicators. No definitions. No reference to other guide.
<i>Expanding DOTS in the Context of a Changing Health System</i>	WHO	2003	C.Hanson	Guide, Reform	http://whqlibdoc.who.int/hq/2003/WHO_CDS_TB_2003.318.pdf	Guidance for NTPs on integrating their work into national health system, including primary health care and ongoing changes.	y	n	n	n	n	Section on M&E talks about integrating M&E, including indicators, into general health system M&E and assuring continuation of M&E during reform.
<i>Guidelines for Cost and Cost-Effectiveness Analysis of Tuberculosis Control</i>	WHO	2002		Guide, M&E	http://whqlibdoc.who.int/hq/2002/WHO_CDS_TB_2002.305a.pdf	Guidelines on assessing the cost and cost-effectiveness of the diagnostic and treatment aspects of TB programs.	y	y	y	n	n	Includes protocols for cost-effectiveness which serve as modified indicators. Also uses standard effectiveness indicators as a source of data for analyzing cost-effectiveness.
<i>External Quality Assessment for AFB Smear</i>	APHL (Association of Public Health Laboratories)	2002		Guide, Labs	http://www.aphl.org/programs/infectious_diseases/EQA.cfm	Provides guidelines and manual for NTPs to assess the quality and reliability of laboratory services for TB.	QA	n	n	n	n	Focuses on quality assurance rather than M&E and is in a QA framework. No mention of indicators but has checklists that capture relevant data.
<i>Operational Guide for National Tuberculosis Control Programs on the Introduction and Use of Fixed-Dose Combination Drugs</i>	WHO	2002	S. Phanouvong, H.Vrakkking, L.Blanc; E.Wondemagegnehu; T.Moore	Guide, pharma	http://whqlibdoc.who.int/hq/2002/WHO_CDS_TB_2002.308.pdf	For NTP managers to encourage and guide them in the use of fixed-dose combination anti-TB drugs; includes programmatic, managerial, procurement, quality, treatment management.	y	y	n	n	n	Only drug management indicators, short list p.38. References <i>Indicators for Monitoring National Drug Policies</i> (WHO,99).
<i>An Expanded DOTS Framework for Effective TB Control</i>	WHO	2002	M.Uplekar, etc..	Policy, General	http://whqlibdoc.who.int/hq/2002/WHO_CDS_TB_2002.297.pdf	Document outlining and explaining WHO's policy on expanded-DOTS. Not a real guide for program managers, but a policy document.	n	y	n	n	n	List of indicators pp.14-15, with general field (e.g. coverage, economic, etc), indicator, and reason for collection.
<i>Strategic Framework to Decrease the Burden of TB/HIV</i>	WHO	2002	D.Maher, K.Floyd, M.Raviglione	Policy, TB/HIV	http://whqlibdoc.who.int/hq/2002/WHO_CDS_TB_2002.296.pdf	Provides the technical basis to inform the development of national TB/HIV implementation strategies - an interim paper between policy and guidelines.	n	n	n	n	n	Makes vague mention of indicators for program performance (p.18).
<i>Training for Better TB Control: Human Resource Development for TB Control: A Strategic Approach with Country Support</i>	WHO, others	2002	K.Bergstrom, J.Glassroth, F.Luelmo,	Policy, HR	http://whqlibdoc.who.int/hq/2002/WHO_CDS_TB_2002.301.pdf	Provides a strategic approach to human resources development and management for TB control, including and beyond training.	n	n	n	n	n	Suggests evaluation of HR plan in one short section.

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>TB Manual: National Tuberculosis Programme Guidelines</i>	UNION/ WHO	2001	W.Jakubowiak, M.Korzeniewska-Kosela, J.Kus, D.Michalowska-Mitczuk	Guide, General	http://www.euro.who.int/docu/ent/e75464.pdf	Manual for TB control, based on Poland. Clinical aspects (treatment, lab, prevention) as well as general strategy for NTP and recording and reporting.	y	y	y	n	n	Indicators listed under NTP Strategy, and seven indicators defined in Annex (cites Thai NTP). Recording and Reporting section focuses on registries, treatment results.
<i>The Use of Indicators for Communicable Disease Control at District Level</i>	WHO	2001	N/A	Guide, M&E	http://whqlibdoc.who.int/hq/2001/WHO_CDS_TB_2001.289.pdf	Guide for district-level health officers responsible for multiple sets of indicators. Basic direction on indicator use and data collection.	y	y	n	n	n	One page list of 14 TB indicators with comments, but not full definition.
<i>Tuberculosis Control in Prison: A Manual for Programme Managers</i>	WHO / ICRC	2000	A.Bone, A.Aerts, M.Grzeska, M.Kimerling, H.Kluge, M.Lewy	Guide, Prisons	http://www.who.int/docstore/gtb/publications/prisonsNTP/PDF/tbprisonsntp.pdf	"Provides a practical tool for health workers considering embarking on TB control programmes in prisons, covering structural and administrative, as well as medical issues."	y	y	y	n	n	Ch.16 "Data analysis & program evaluation" lists basic indicators with definitions & suggests other and prison-specific indicators. Annex 8 also has indicators.
<i>Management of TB: A Guide for Low-Income Countries (5th ed)</i>	UNION/ Misereor	2000	D.Enarson, H.Reider, T.Arnadottir, A.Trebucq	Guide, Clinical	http://www.iuatld.org/pdf/en/guides_publications/management_of_tb.pdf	Guide for health professionals on diagnosing, treating, and caring for TB. Primarily clinical, but also section on "protecting the community".	y	n	n	n	n	Mostly clinical, but mentions importance of M&E - about 3 pages on topic.
<i>Indicators for Monitoring National Drug Policies</i>	WHO	1999	P.Brudon, J-D.Rainhorn, M.Reich	Guide, Pharma, Non-TB	http://whqlibdoc.who.int/hq/1999/WHO_EDM_PAR_99.3_pp1-114.pdf	Manual with indicators to assess a country's capacity to implement a national drug policy, monitor the policy's implementation progress, changes, and achievement of objectives.	y	y	y	n	n	No indicators specific to TB, but list, definitions, and guidance on use of given indicators for pharmaceutical management which can be adopted to NTP use.
<i>NGOs and TB Control: Principles and Examples for Organizations joining the fight against TB</i>	WHO	1999	I.Smith, T.Frieden, JP.Narain	Guide, General	http://whqlibdoc.who.int/searo/1994-99/NGOs_TBcontrol.pdf	Guidelines for NGOs wanting to get involved in TB control and a call for greater NGO involvement. Introduces TB control, models for NGO involvement, and factors in their success.	n	n	n	n	n	Only very broad guidelines. Suggests NGOs get involved via operations research and presents an example.
<i>Guidelines for the Prevention of Tuberculosis in Health Care Facilities in Resource-Limited Settings</i>	WHO	1999	R.Granich, N.Binkin, W.Jarvis, P.Simone, H.Rieder	Guide, General	http://whqlibdoc.who.int/hq/1999/WHO_TB_99.269.pdf	Guidelines containing inexpensive and effective strategies for preventing the spread of TB in health care facilities.	y	y	n	n	n	Short section (Ch.4.2.9) on evaluating infection control interventions, with a short list of "outcome measures".

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>Tuberculosis Handbook</i>	WHO	1998	A.Pio, P.Chaulet	Guide, General	http://www.who.int/docstore/gtb/publications/tbhandbook/PDF/WHO98_253-en.pdf	Pre-DOTS, guidance for TB control managers on planning, implementing, and evaluation programs. Covers reporting, labs, logistics, clinical, etc.	y	y	n	n	n	Ch.7 on Supervision, Monitoring, and Evaluation includes list of indicators, no definitions.
<i>Laboratory Services in Tuberculosis Control: Part 1 Organization and Management</i>	WHO	1998	IN.deKantor, S.J.Kim, T.Frieden, A.Laszlo, F.Luelmo, PY.Norval,	Guide, Labs	http://whqlibdoc.who.int/hq/1998/WHO_TB_98.258_(part1).pdf	Guidelines for standardized laboratory services for TB control. Two technical volumes and one (Part 1) on laboratory management and safety.	y	n	n	n	n	M&E only in the context of quality assurance, recording and reporting requirements and forms, and necessity of supervision.
<i>The Public Health Service National TB Reference Lab and the National Lab Network</i>	UNION	1998	H.L.Rieder, T.M.Chonde, H.Myking, R.Urbanczik, A.Laszlo, S.J.Kim, A.vanDeun,	Guide, Labs	http://www.iatld.org/pdf/en/guides_publications/public_health_service.pdf	Provides guidance to NTPs on the reference lab's role, responsibilities, and technical and organizational aspects of smear examination and surveillance of drug-resistant TB.	QA	n	n	n	n	No information on indicators, and captures M&E only in framework of quality assurance, some reporting and recording.
<i>Tuberculosis Programs: Review, Planning and Technical Support: A manual of methods and procedures</i>	UNION	1998	T.Arnadottir, H.Rieder, D.Enarson	Guide, M&E	http://www.iatld.org/pdf/en/guides_publications/tb_programs.pdf	NTP implementation guide covering program review, implementation, and technical support.	y	y	n	n	n	Covers importance of and minimal basic M&E; specific topics to be covered and a short list of sample "measurements". Short list of indicators p.49. Overall, very limited guidance on M&E.
<i>Guidelines for Conducting a Review of a National TB Program</i>	WHO	1998	J.Kumaresan; F.Luelmo; I.Smith	Guide, M&E	http://whqlibdoc.who.int/hq/1998/WHO_TB_98.240.pdf	Provides the methodology to conduct a review of a NTP, externally or internally. To assess TB burden, evaluate the adequacy of NTP programs/policies, and promote improvement.	y	y	n	n	n	Annexes include tools/questionnaires for NTP staff that collect indicator data but not presented as indicators.
<i>Tuberculosis Control in Refugee Situations: An Interagency Field Manual</i>	WHO / UNHCR	1997		Guide, General	http://whqlibdoc.who.int/hq/1997/WHO_TB_97.221.pdf	Guidelines for the implementation of a TB control program in a refugee situation. Includes both clinical and programmatic guidelines.	y	n	n	n	n	Basic monitoring information does not go beyond reporting and recording, with no information on indicators. Refugee TB control as a subset of NTP.
<i>Managing Drug Supply: The Selection, Procurement, Distribution, and Use of Pharmaceuticals (2nd ed.)</i>	MSH / WHO	1997		Guide, Pharma	http://www.msh.org/resources/publications/ebookstore/product.cfm?p=43	Not freely available. Not focused specifically on TB, but should have a section on indicator-based assessments.						

APPENDIX F: COMPARABLE PUBLICATIONS

Title	Publisher	Date	Authors	General Area	Location	Description (usually verbatim from resource)	Includes guidance on TB M&E?	Includes indicator list?	Indicators defined?	Comp Ref'd?	Comp Rec'd?	Notes
<i>Rapid Pharmaceutical Management Assessment: An Indicator-Based Approach</i>	MSH / PAHO / USAID	1995		Guide, Pharma, Non-TB	http://pdf.usaid.gov/pdf_docs/PNABX699.pdf	Presents an indicator-based approach for rapidly assessing pharmaceutical management systems and programs. 8 topics, 46 indicators.	y	y	y	n	n	Indicators for pharmaceutical management, but none specific to TB.